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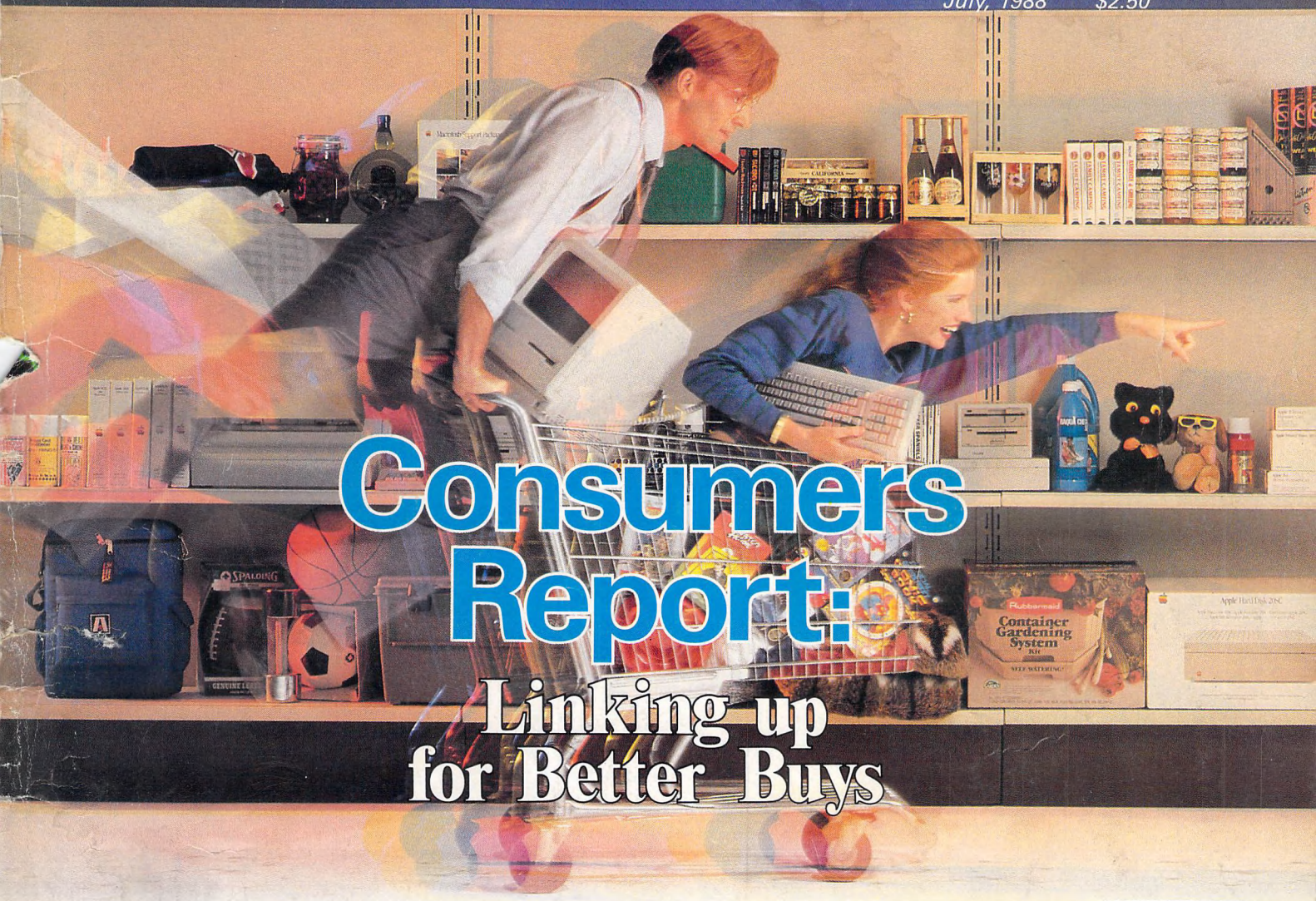

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Too Hot to Print

Catch computer industry news as it happens, keep up with online events, read special reports, commentary and more product reviews. You'll find it only in *Online Today Daily Edition*, a daily-updated newspaper full of information that's too hot to print. GO OLT.

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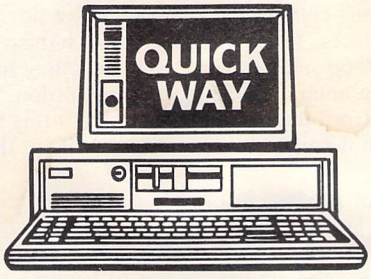

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DEAR READER

If you're thinking about buying a new CD player, camera, tropical fish aquarium or even a radio-controlled helicopter, you may be interested to know that you can find detailed information about these products and more right from your personal computer—before you head for your local retailer or access The Electronic Mall.

Through several hobby, computer and product-related forums and databases on CompuServe, you can gather the necessary details—price, performance, reliability, durability—from other consumers and forum administrators who have used the products. For example, the Photography Forum's message board is "always buzzing with talk about this lens or that film. The discussions are filled with comparisons and technical information not available in popular publications," according to Mike Wilmer, forum administrator.

The interactive environment of the forums enables users to exchange tips and respond to comments about the latest products. In fact, during major industry trade shows, members of the Consumer Electronics Forum, wherever they happen to live, can hear about products as they are announced since Dawn Gordon, forum administrator, submits online reports from the trade show floor. In this forum and others, members also upload their own detailed product evaluations to the forum libraries for all to peruse.

To learn how to tap into these sources of product information, see this month's cover story, "Consumers Report: Linking Up for Better Buys," beginning on page 46. Writer Daniel Janal, who himself has filed stories from industry trade shows, summarizes resources and strategies subscribers can use to become better at making buying decisions.

* * *

Read about how to use CompuServe more easily and at less cost with one of three customized programs that automate routine tasks: AUTOSIG, Navigator and TAPCIS. For more information, see the Computing Services section beginning on page 24.

Also in this issue's News/Reference section, find out how to get headline news in a snap with a service called McGraw-Hill News SNAPSHOT (page 20) and how to stay abreast of developments at the Democratic and Republican national conventions with the Washington Post Newsletter on CompuServe's Executive News Service (page 22).

Finally, if you're thinking about heading West, see this month's Travel section, beginning on page 52, for California's best of historic and modern destinations: Nevada City and Los Angeles.

Douglas G. Branstetter
Editor

ONLINE TODAY

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Volume 7 Number 7

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LETTERS

Multi-tasking Micros

Although I do not like to compare computers, I must reply to Don Curtis' letter (May issue, p. 5). The Amiga is certainly not the only personal computer that has multi-tasking abilities. In fact, it is not even the first. The Radio Shack Color Computer has been able to do multi-tasking since the release of OS-9 for the CoCo—more than five years ago, long before the Amiga was in the final design stage.

Marc Salzberg
Oceanside, N.Y.

The Microware OS9 operating system has been available for personal computers since around 1980. This same operating system was made available for the Radio Shack Color Computer around 1983. This operating system is not only multi-tasking, but also multi-user. Find out more in the OS9 Forum on CompuServe (GO OS9).

Larry Olson
Waterford, Mich.

A recent letter to *Online Today* stated that the only personal computer that has supported multi-tasking for several years is the Amiga. This would be a surprise to the many people who have run OS-9/6809 on Color Computers since the fall of 1983, or on other 6809-based computers since around 1980.

James Jones
West Des Moines, Iowa

Don Curtis makes the odd statement that "the only personal computer that has been able to do multi-tasking for years is the Amiga." This is odd because I've been using Xenix on my Tandy since 1984. It is not only multi-tasking but also multi-user.

Jean-Pierre Radley
New York, N.Y.

Online Today Daily Edition

I am interested in accessing an earthquake prediction by Nostradamus which was documented in "Community News," but I lost the reference.

Frank J. Grimmelmann
San Francisco, Calif.

Editor's Note: To read the file about Nostradamus' prediction, access the Astronomy Forum (GO ASTROFORUM) and read NOSTRA.TXT in Library 0.

It might be useful to subscribers to have the conference schedules presented in a daily format in addition to a listing by forum. Then if I sign on, for example, on Saturday, I would know what conference I might go to.

Steve Frank
Parsippany, N.J.

Checks & Balances Review

There was one minor error in the review of Checks & Balances (May Software Reviews, GO OLT-3870). It mentions 64 categories for budget summaries but there are 128.

There have been many enhancements to C&B plus a quarterly newsletter to registered users. Users are urged to contact CDE Software regarding upgrades and to become registered (if they are not currently receiving the newsletter). A tutorial will be appearing in the July issue of *Profiles* magazine. Through July 31, 1988, CompuServe users may receive Checks & Balances from CDE Software for $56.21 (25 percent off the $74.95 list price). Be sure to identify yourself as a CompuServe subscriber and include $3.50 for shipping/handling (plus tax for California orders).

Patrick Lajko, President
CDE Software
Los Angeles, Calif.

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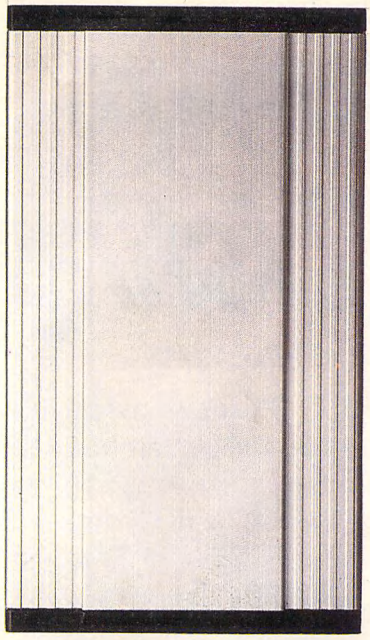

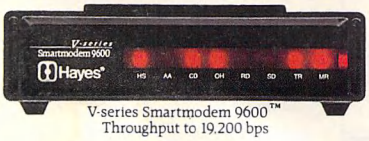

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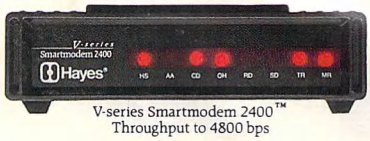

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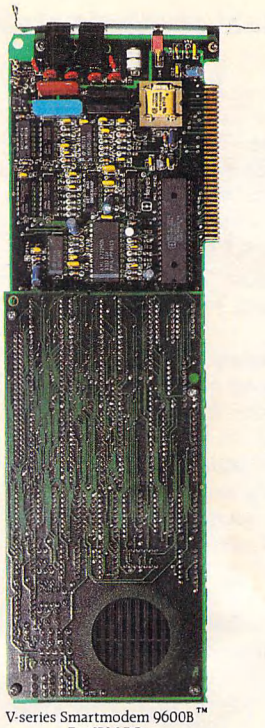

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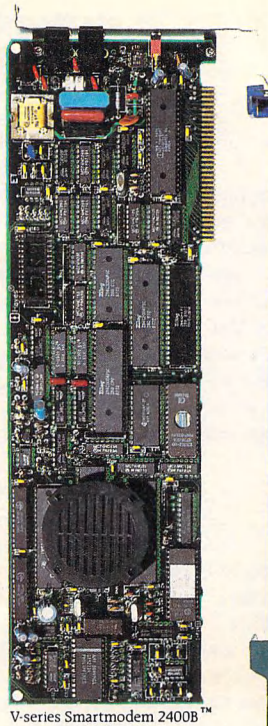

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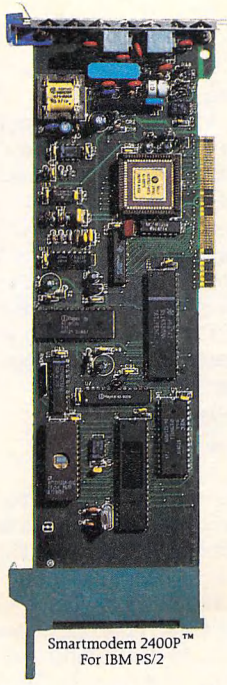

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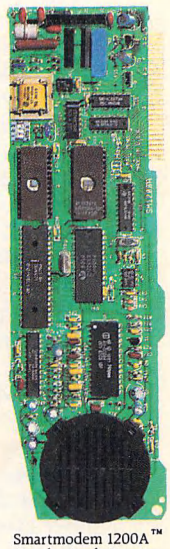

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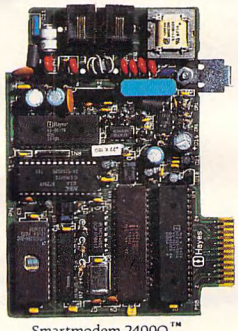

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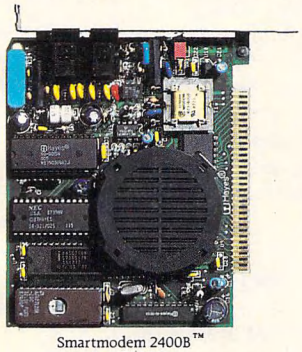

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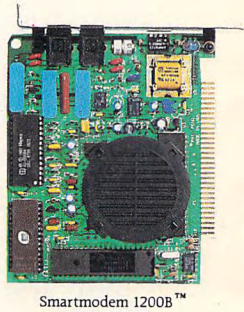

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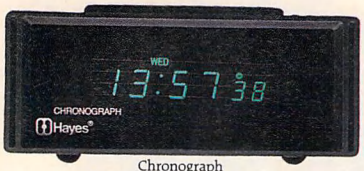

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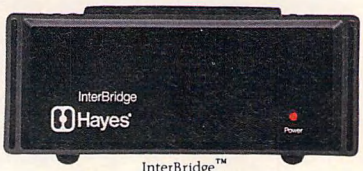

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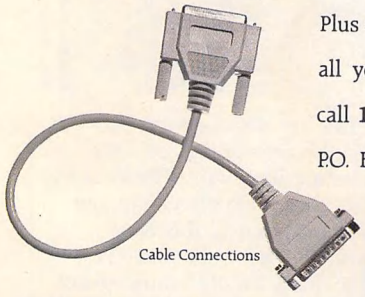

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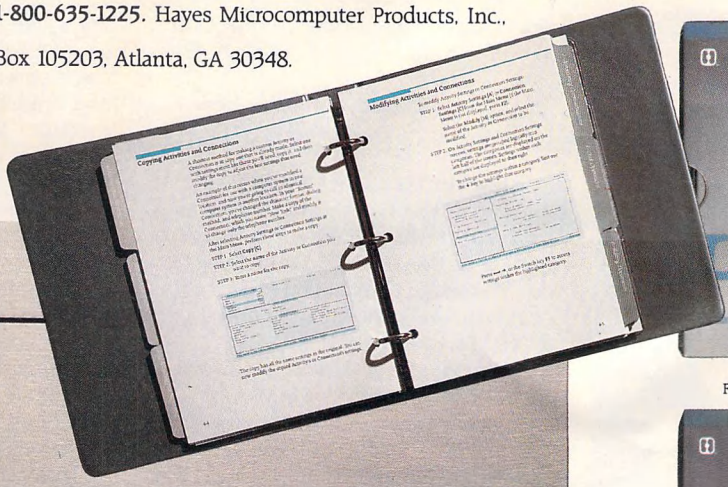

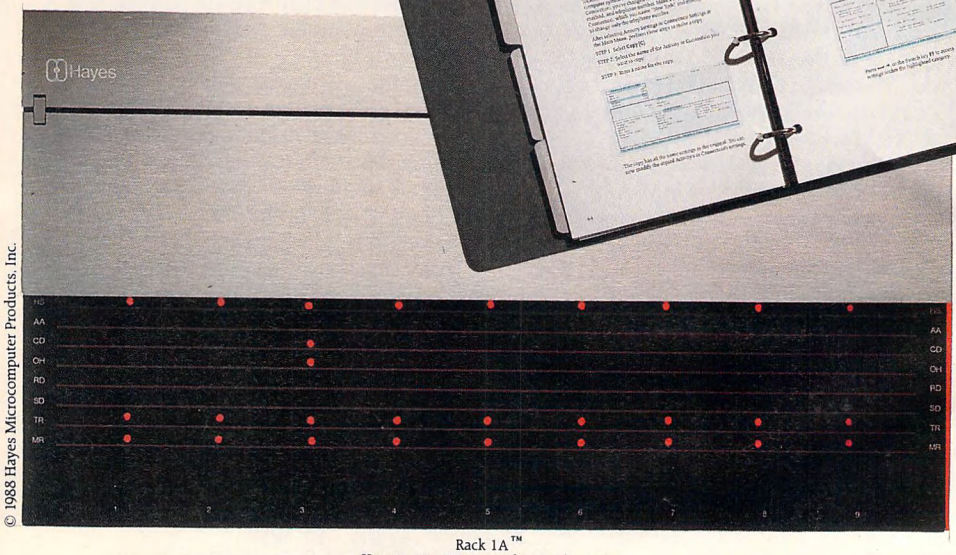

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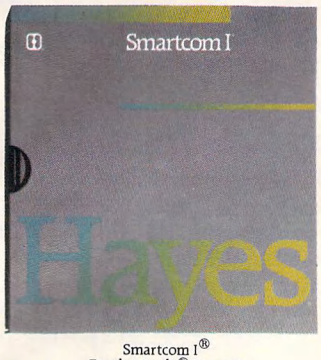

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Computer Shock

You may love your hard disk and 2400-baud modem, but beware: You may suffer from "computer shock," according to the first shareware book, *Computer Shock: Living and Working in a High-Tech World*. Edited by Dr. Roger Bullis, a professor of communication at the University of Wisconsin, the book is a compilation of articles about the varied effects computers have on our lives.

Bullis takes a critical look at the changes taking place in society as a result of computers. Computers and telecommunications have, for instance, opened employment opportunities for those who want (or need) to work from home.

Even with the advantages a computer can offer an office—word processing, desktop publishing, coast-to-coast communications with subsidiaries and branches—they are also changing the labor force as well as the very nature of work. "The work place is becoming for many an electronic sweatshop where clerks are being paid by the piece for how much they are able to do," says Bullis.

Computers are also changing the nature of government and the political process. Because of microcomputers, for example, the news media can conduct polls and predict the winner of the presidential election before voters in California have cast their ballots.

Computers also have the potential to create what Bullis calls a "true democracy," where citizens would tell their elected representatives—via computer—their opinions on any issue. "If this happens, we would no longer have an elected democracy, but rather tyranny of the majority. The frightening thought is that the majority is not necessarily informed, yet they would determine public policy," he says.

Still, Bullis admits that his book wouldn't have been published without the help of computers. When he couldn't interest the traditional publishers in the topic, he decided to try a do-it-yourself approach. The result is a shareware book available on CompuServe in the IBM New Users Forum (GO IBMNEW) in Library 9. (The book is in two files: SHOCK1.ARC and SHOCK2.ARC and requires the accompanying program SHOCKM.COM to read it. An IBM PC or compatible is necessary.)

Bullis is asking his readers to send a shareware donation of $7.50. He will also send the book on disk for $15.

For more information, contact Bullis in the forum (User ID number 73177,1022) or at the University of Wisconsin, Division of Communication, Stevens Point, WI 54481.

—Cathryn Conroy

How Do You Say It?

It may not be Berlitz and it's certainly like no high school foreign language class, but you can learn a little Japanese on CompuServe.

Many useful phrases are provided, so you can order beer, converse with your teacher, make an apology, find the bathroom and say good-bye to your host. Being polite and observing the cultural rules of decorum is most important in Japan. Good manners are more than behavior; they are also tied into the language, according to David Ashworth, teacher of the online mini-course in Japanese, which is available in the Foreign Language Education Forum and the Public Relations and Marketing Forum.

"For example, in Kyoto, which is reportedly conservative, when you prepare to leave at, say, 5:00 in the afternoon, the host will insist you stay for dinner," says Ashworth. "If you protest, he will say 'moo tanonde arimasu kara' (Everything has been ordered, so ...). Don't take him literally. The fact that he mentioned dinner indicates that it is getting late. You must insist on leaving—or be the butt of gossip about 'hen na gaijin' (a strange foreigner)."

Ashworth, an associate professor of Japanese at the University of Hawaii, is director of the Japanese Language Program at the Japan American Institute of Management Science. He learned Japanese in Japan and at Sophia University.

Currently on sabbatical, Ashworth is supposed to be writing a book on teaching Japanese, but has gotten sidetracked with a fascination for hypertext, which allows Macintosh and IBM PC users to integrate text, graphics, sound and animation on the screen.

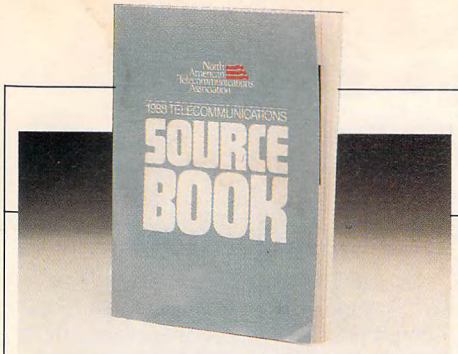
The online lessons he composed are written in a hypertext program and are specifically designed for first-year adult students of Japanese and business people who expect to have contact with the Japanese.

The file SHAKAI.TXT, which will teach social expressions in the context of a visit, can be found in Library 7 of the Foreign Language Education Forum (GO FLEFO) and should be used with HYPE.COM on an IBM PC or compatible with a monochrome or color monitor. (Ashworth is exploring hypertext applications for the Macintosh.)

To use the file, download both and at the DOS prompt, type HYPE SHAKAI.TXT (the blank after HYPE is necessary). The program is self-explanatory once it has been loaded.

For those who don't own the appropriate equipment, an edited version of the lesson is available in a textfile in the Public Relations and Marketing Forum's (GO PRSIG) Library 10 under the file name JLANG.TXT.

For more information, contact Ashworth in the Foreign Language Education Forum at User ID number 76327,1470 or at 92-418 Leiole St., Ewa Beach, HI 96707; 808/672-3147.



Telecommunication bible: *Sourcebook*

Scan Industry Sources

The North American Telecommunications Association's *1988 Telecommunications Sourcebook* is widely recognized as the telecommunication industry's "bible."

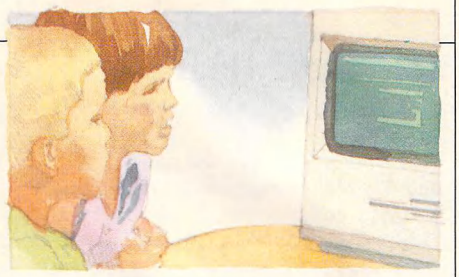
The 250-page volume lists consultants, manufacturers, suppliers, telecommunication managers, financing and leasing firms, venture capitalists, interconnect contractors and people interested in pursuing a telecommunications career.

The book, which costs $35, can be ordered from the North American Telecommunications Association, 2000 M St. N.W., Washington, DC 20036.

Network Links Rural Schools

Montana is known as "big sky country," which is reflected in its far-flung school system. Teacher Frank Odasz wants to use computers and telecommunications to link more than 100 one-room schools in rural Montana. Odasz is also system administrator of the Western Montana College's Big Sky Telegraph Bulletin Board System.

Big Sky Telegraph is funded by grants from the M. J. Murdock Charitable Trust of Vancouver, Wash., and the Mountain Bell Foundation of Montana. Odasz's goal for the BBS is to develop a grassroots educational telecommunications program that can be useful in the development of rural teaching programs. The system contains a software preview loan library, a lesson plan database, and online lessons for teachers and students.



"The Office of Public Instruction in Montana has been supportive of our efforts to network teachers around the state," says Regina Odasz, who also works through the BBS. "[They] have a long record of trying to help teachers to do a better job, and it shows."

Teachers who would like more information can contact Odasz and Big Sky Telegraph at 406/683-7680.

Teachers discuss other education matters online with students, parents and education professionals in the Education Forum (GO EDFORUM).

—James Moran

Reaching Out Online

The growth of online communities that link people from different locations and vocations has attracted the attention of scholars. One of the first published studies is *Mind at Large: Knowing in the Technological Age* by CompuServe subscriber Paul Levinson (JAI Press, 1988). Levinson, a college professor, is also president of Connected Education Inc., an organization offering online classes and degrees through New York's New School for Social Research.

King Associates

Electronic communication has spawned an online community where people can conduct business, exchange ideas and become friends without ever meeting in person. "It's a fascinating ballet across time and space when people from throughout the world can contribute to a discussion. This sort of thing has never happened before," he says.

Levinson calls this phenomenon "interactive asynchronicity," which he says allows users to take time to think before reading and responding to messages. Levinson believes this ability to pause gives people the opportunity to display more of their true personalities online than is possible in many face-to-face experiences.

Still, there are some drawbacks. Much of human communication is centered on non-verbal gestures, such as eye movements, which are missing online. However, Levinson notes that online communicators seem to make up for this through qualifiers placed in brackets: <grin!> <frown> <hugs> <wink>. People also vary the letters, writing some in all caps for emphasis or placing some in stars or bars to convey a subtle point.

Levinson believes online communication is as revolutionary as the development of the alphabet or the printing press. "Throughout history, text has been official and formal, except for maybe poetry or love letters. Now it is being used in the online community to produce the immediacy of conversation," he says.

Levinson says the online community has had its greatest effect in business, educational and social relationships.

Business has always depended on the exchange of information, and electronic communication is enhancing that. Businesses are more in control of information when it is exchanged online than through more traditional channels. In addition, it opens the lines of power for all. Meetings conducted online have more equality and flexibility.

Professors who teach online find they get to know their students better since it is difficult for a student to disguise his true style. Online students must participate.

Social relationships, too, can benefit from the online exchange, although the fantasy factor is high, which can lead to disappointments when people actually meet.

For more information, contact Levinson through EasyPlex at User ID number 72517,3107 or Connected Education Inc., 92 Van Cortlandt Park South, #6F, Bronx, NY 10463; 212/549-6409.

—Cathryn Conroy

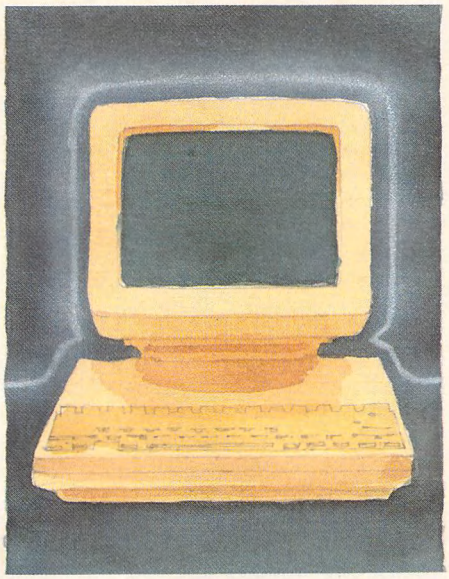
Hardware Heaven

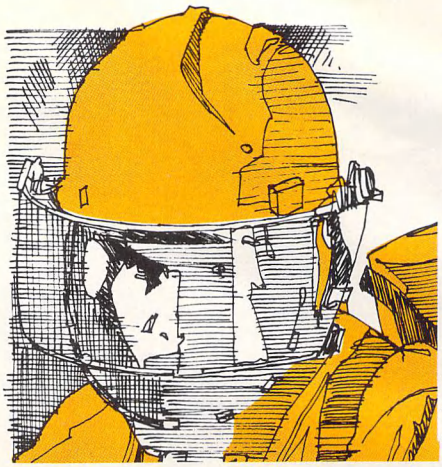
What kills a microcomputer most often?

Power surges caused nearly half of the 559,000 microcomputer losses last year. In dollar terms, electrical transients fried about $35 million worth of micros in 1987, according to The Insurance Agency Inc. of Columbus, Ohio, which claims to be the nation's largest microcomputer insurer. The next leading cause of micro death was theft. In 1987, thieves carried away 137,000 systems with a total value of more than $154 million. The total value of all computer losses was $250 million.

More details are available from The Insurance Agency Inc., 2929 N. High St., Columbus, OH 43202; 614/262-0559.

—John Edwards





King Associates

Software Predicts Fire Hazards

The National Bureau of Standards is testing a software system that predicts fire hazards.

The Hazard I software system runs on a microcomputer and includes a set of procedures and the programs necessary to conduct a fire hazard analysis. Although the system is not ready for general distribution, a limited group of fire and building professionals has agreed to evaluate it and assist in the development of future versions.

Fire safety in the United States is defined by a series of building and fire codes, according to the NBS. However, the development of new building materials and construction techniques requires a continual updating of the codes. Hazard I is designed to update existing codes by quickly and safely evaluating new materials technology.

The software accomplishes the evaluation by a computer simulation of the hazards during a fire and the actions of those attempting to escape. The simulation model was constructed from psychological studies and interviews with people who have escaped fires.

Other procedures within Hazard I produce estimates of the gases, smoke and heat to which people are exposed in a particular fire scenario, and determine the circumstances under which the hazards are fatal.

Since Hazard I is still a prototype system, its capabilities are limited. Currently, it can be used only for single-family residences, such as ranches, two-stories and townhouses. However, enhancements are expected to include larger residences and commercial buildings.

For now, not enough research information has been obtained on the movement of heat and smoke in large building models. The NBS plans to continue development of Hazard I so it can be used by non-professionals.

The developers plan to eventually make the system available to teach fire safety to children. An expanded Hazard I could also be made available to consumers wanting to make their homes safer.

Additional information is available from the National Bureau of Standards Center for Fire Research at 301/975-6879.

More fire safety information is available in CompuServe's Safetynet (GO SAFETY).

—James Moran

Collision Control

A San Diego company, Radar Control Systems Corp., has created a computer-controlled car accessory that can significantly reduce the number of rear-end automobile collisions.

The product, dubbed "The Lockout," uses an on-board radar system to warn users of upcoming road obstructions, including slow or stalled traffic. At the first sign of danger, the unit generates an audible warning. If a collision is imminent and the driver makes no attempt to stop the vehicle, The Lockout's computer automatically engages the car's brakes.

John Davis, RCS's president, says the biggest problem the company faced in creating The Lockout was eliminating the false readings produced by stationary objects such as trees and parked cars. He claims the latest version of the unit "has all but eliminated this problem."

At least one government agency is impressed by The Lockout's potential. The California Department of Transportation is conducting a $300,000 test study of the unit. The CDOT is evaluating The Lockout on a fleet of 10 agency vehicles.

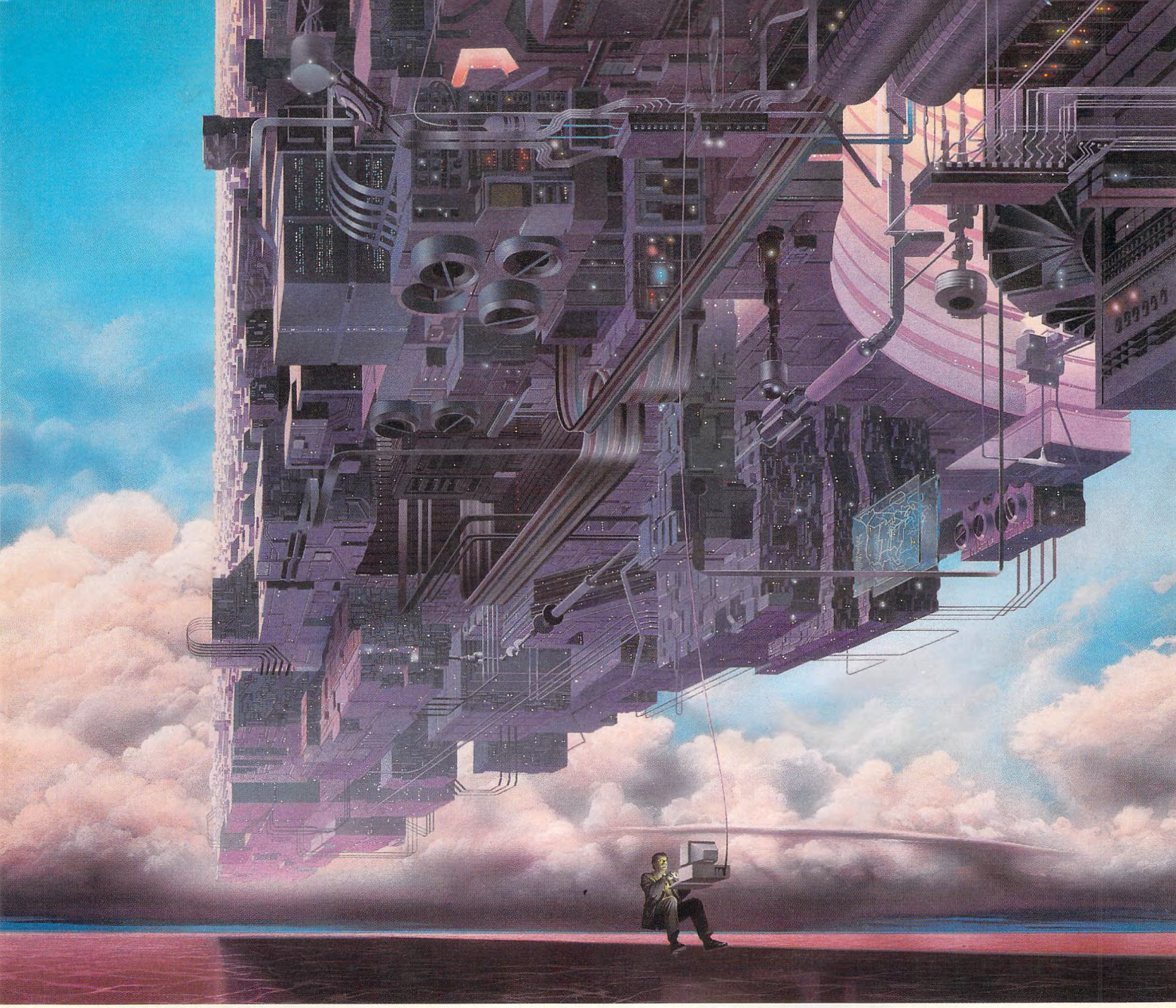
Davis says The Lockout, in its production version, would cost car owners between $500 and $1,000. After investing more than $1.5 million of the RSC's money in the invention, he hopes the unit will eventually become standard equipment on all cars sold in the United States.

For additional information, contact RCS at 619/279-8740.

Get Computer Industry News

Online Today Daily Edition's Monitor section keeps you abreast of the latest computer and information industry news. Stories are added several times each day and the hot items are highlighted on our front page, OLT-1. A week's worth of recent news is always available for review (OLT-20). To read today's news, type GO OLT-90 at any CompuServe Information Service prompt.

***MONITOR DAILY NEWS**	**OLT-160**
About Monitor	**OLT-359**
Behind the Screens	**OLT-130**
Calendar of Events	**OLT-1000**
Headlines	**OLT-1**
Recent News	**OLT-20**
Reporting News to Us	**OLT-352**
Special Reports	**OLT-2000**
Today's News	**OLT-90**



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How to Get the Most Out of CompuServe

Understanding the Path of Pages

by Charles Bowen and David Peyton

When we were young, a new kind of book called "Tutor Text" changed the way we thought about information on a page.

Tutor Text books always covered a single subject (practical law, intermediate algebra or standard English, for example) and were meant to be read in an unusual way. Instead of starting with page 1 and continuing to pages 2, 3 and 4 in sequence to the end, a Tutor Text had you jumping throughout the book. Usually, an early page would state a fact or principle along with a problem and several possible answers. If you thought the correct answer was the first possibility, you might be directed to turn to page 46; if you chose answer 2, you would be directed to page 211, and so forth. Each "target page" contained a discussion of your selection, why your choice was right or wrong and directions to the next page.

At the time, the Tutor Text idea reminded some people of an earlier (and certainly less-laudable) alternate use of the printed book format. In junior high school, some publicly owned textbooks routinely were distributed at the beginning of a class for a reading assignment, then taken up again at the end of the hour. That meant we were reading books that had been used (and abused, as it turned out) by generations of young scholars before us.

In one of those dog-eared volumes you might be wading through your assigned reading of *Great Expectations* when suddenly you came across a penciled instruction scrawled in the margin that whispered suggestively, "Turn to page 253." You did, of course. Not only was this more inviting than whatever Pip was doing, but, considering the book's age, the playful message might have come from Grandpa.

The message on page 253 invariably said something like, "Now turn to page 114," and page 114 directed you elsewhere. By the end of the class, you had leafed through scores of pages and almost always ended up with a silly, chiding message that told you explicitly what a dunderhead you were.

The point is that both of these systems illustrate new uses for pages of data, examples of how information can be distributed in a non-sequential way.

Perhaps a decade ago the designers of consumer videotex had similar memories, because today's information services have the same non-linear structure. And it's there we should start when we want to understand CompuServe's structure, for in the beginning was The Page.

Or rather, The Menu. Even a cursory exploration of CompuServe shows the system to be built on thousands of screens of information. Like pages in the old Tutor Text books, most of CompuServe's screens contain menus of options that lead to other electronic pages. While most screens have page numbers (or addresses), the pages aren't linked sequentially, but rather by related subjects.

On your first visit to the system you were greeted by such a menu:

```
******************************
CompuServe                  TOP
  1 Subscriber Assistance
  2 Find a Topic
  3 Communications/Bulletin Bds.
  4 News/Weather/Sports
  5 Travel
  6 The Electronic Mall/Shopping
  7 Money Matters/Markets
  8 Entertainment/Games
  9 Home/Health/Family
 10 Reference/Education
 11 Computers/Technology
 12 Business/Other Interests
 !
******************************
```

It's hard to imagine any computer user not knowing how to use such a menu. However, in speaking to groups and clubs during the past several years, we've met more than one person who did not. They describe what they see on the screen ("numbers followed by sentence fragments") and then earnestly ask what to do next. For their benefit, then, let's go slowly here. Besides, menus are deceptive in their simplicity; as used on CompuServe, they're actually rather sophisticated tools. Slowing down a little may allow us to see this more clearly.

Throughout the system, menus differ (depending on their options), but they all share two characteristics:

First, they all conclude with a *prompt*. Notice the exclamation point (!) at the bottom of our example. Throughout CompuServe, whenever the screen stops at an !, the system is waiting for you to type in a selection or a command. The easiest way to respond is to type a number for one of the options listed on the menu. For instance, from our example, if you want to see "News/Weather/Sports" features, type 4 at the prompt. Beyond that, as you become familiar with using menus, you also may want to use a shortcut from this prompt to specific services.

All commands entered at a prompt are followed by a carriage return, usually abbreviated in online messages as "<CR>" in prompts such as "Press <CR> to continue." This means, of course, the Return or Enter key on your keyboard. Incidentally, at such prompts you sometimes also have the option of pressing only the Return key as your selection. The secret is to read the menu and prompt before responding.

The second thing CompuServe menus have in common is the placement of page numbers. Most screens have a page number in the upper-right corner, such as the "TOP" in our example. Elsewhere in the system, you'll find page numbers consisting of several alphabetic characters and a dash followed by a number such as OLT-90 and CB-1. In other words, page numbers can be either a group of letters (OLTFORUM, IBMNEW or QQUOTE) or letters and numbers (OLT-130 or CIS-59).

CompuServe's menus are sophisticated because their prompts actually can accept several kinds of input. As we've seen, you usually type the number of a listed option. However, in addition, you can use the GO command to go directly to a specified page number in the system. The command is GO followed by a space and then the page number. So, if you want to go directly to the daily computer news in *Online Today Daily Edition* (which has the page numberr OLT-90), you can type GO OLT-90 at any system prompt.

Here are some tricks with the GO command.

- You can abbreviate GO to the letter G and shorten the page number by eliminating the dash, such as G OLT90.
- Drop the numbers after the initial characters and you can go to a service's first page. For example, to go to the front page of *Online Today Daily Edition*, you can type GO OLT.
- Once inside an area, you sometimes can drop more characters from your GO commands. For instance, inside

Online Today Daily Edition, news stories all have individual page numbers beginning with the letters OLT. However, once you've reached the OLT feature itself, you can type GO 90 to reach the page OLT-90 and GO 130 to reach OLT-130.

Actually, several kinds of menus are in use in CompuServe. Some lead to other menus. In the first example, every option on the Top menu takes you to other groups of menus around the system. Following the menu trail eventually brings you to menus that provide specific features or files that can be read. For instance, all news stories in *Online Today Daily Edition* are provided on a menu like this:

```
******************************
Online Today                OLT-90
Today's Monitor News
  1 Prime Cuts Work Force
  2 AMD Exec Lauds Trade
    Agreement
  3 IRS: Online Filing 'Success'
  4 MCI Unveils Interconnections
  5 Nynex to Test Online Gateway
  6 Graphics System Gets Patent
  7 Nintendo Dominates Game Market
  8 Modem Market Still Growing
  9 1-2-3 "Value Pack" Released
!
******************************
```

When you reach a menu for readable features like this, you can type yet another command at the prompt. Typing ALL causes the system to display each story, one after another. Or you can type a range of option numbers, such as "1,3,5" to see stories 1, 3 and 5, one after another; "1-4" to see the first four items; or you can mix the two approaches, with something like "1,3-5" or "3-5,1."

Finally, some menus on the system use special symbols or "flags" to provide additional information about certain features. A menu item may be listed with the symbol ($). This denotes a surcharged product; in other words, you incur extra costs in addition to connect-time charges.

Here are four other menu flags used throughout the system:

- (E) means an Executive Option product. You need to subscribe to the Executive Option to use it. (For more information on the Executive Option, type GO EXECUTIVE at any prompt.)
- ($E) is a surcharged Executive Option product. You incur extra costs in addition to connect-time charges and must subscribe to the Executive Option to use it.
- (M) means "Merchant," that is, the feature is provided by one of the merchants in The Electronic Mall®. (For more information, type GO MALL at any prompt.)
- (W) stands for "wide display" product. Products that are so marked use lines that exceed the standard 32-character screen display. (The display may be unclear for a computer that supports only a 32-character screen width.

Next month we'll concentrate on navigational commands used to travel through the system's trails of menus.

Charles Bowen and David Peyton co-authored How to Get the Most Out of CompuServe *and* CompuServe for IBM PC Power Users. *Bowen's CompuServe User ID number is 70007,411 and Peyton's is 76703,244.*

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GO OLI or circle 7 on the Reader Service Form.

Dividends Yield Insight

Stock Investors Study Payment History

by Cathryn Conroy

There are many ways to play the stock market, but all players share the same goal—to make money from the dividends corporations pay their shareholders. Although dividends are usually paid in cash, other assets can and have been used. A distillery corporation, for example, once paid its shareholders in bottles of whiskey.

This didn't start a trend—no, IBM Corp. is not giving away PS/2 computers to stockholders—and a close look at a company's dividend payment history remains a good way to judge the performance of a corporation's stock. The best place to get that information is from CompuServe's Historical Stock/Fund Pricing menu (GO SECURITIES).

Let's take a hypothetical case. As a personal investor, you have decided to invest your income-tax refund and the interest earned from your savings accounts in 1987 in the stock market. You are considering several possible investments but want to know more about each before you actually make your move.

A first step is to learn more about the dividend history for each of the companies you have in mind. By typing GO DIVIDENDS and entering the company ticker symbol (such as IBM for IBM Corp. or HRB for H&R Block) at the Issue prompt, you can get that information. (If you need to check the ticker symbol, type GO TICKER.) The system will prompt for a date range or you can enter the most recent number of dividends you would like to see (such as the last 12 dividends).

Seconds later, information on the company's dividend rate is presented. The *dividend rate* is the amount of dividend paid per share or the rate of the split. The form the dividend took—cash or split—is also given. Cash is the most popular form of payment.

A *split* increases the number of shares and proportionally decreases the value of each share. For example, 100 shares of stock valued at $50 a share will split to 200 shares at $25 a share. The purpose behind a split is to increase the stock's marketability—and drive up its price—by making it less expensive and therefore more attractive to a larger number of investors.

Another form of payment to stockholders is the *stock dividend*, which increases the number of shares outstanding by proportionally allocating a percentage of new shares for each share held. For example, a shareholder who owned 100 shares prior to a 5 percent stock distribution would own 105 shares after the dividend. The advantage of a stock dividend is that while cash dividends reduce the amount of funds available for other purposes, stock dividends preserve valuable cash. Because the percentage on a stock dividend is small—usually 5 to 10 percent for each share held—the market price of the stock is usually unchanged, thus creating a gain for the shareholder. Another plus: stock dividends are taxed only when sold, so shareholders can defer taxes that would otherwise be paid on a cash dividend.

Other information displayed when the Dividends program is accessed includes the *ex-date*, the date after which a holder of shares is not entitled to the declared dividend, and the *record*. The *record* is the date on which the stockholder must have owned the shares. The *payment*, or the actual date of disbursement, is also presented.

If you want to go into more depth, you can find the indicated annual dividend for an issue through the Detailed Issue Examination Service (GO EXAMINE). The *indicated annual dividend per share* is computed by taking the regular cash dividend times the frequency of payments over a 12-month period. Extra dividends that might be awarded are also included in this figure. Once again, all you have to do is type the ticker symbol at the Issue prompt. You'll receive other information about the stock, including the volume, shares out, high, low, close, the 52-week high and low, the trading status, risk measures and more.

The *dividend yield* is the annual amount of the dividend divided by its current stock price. It is an indicator of the return income you can expect if you invest in a company. For instance, if a company pays 25 cents a share quarterly and the market price of the stock is $10, the dividend yield is 10 percent. Dividend yields can be identified on the Price/Volume Graph (GO TREND) and on the Detailed Issue Examination Service, or used as a selection criteria when identifying potential investment candidates on Disclosure Company Screening (GO COSCREEN).

Many firms have a specific *dividend payout ratio*—the percentage of earnings per share paid to shareholders (usually in cash)—that they want to maintain. Electric and telephone companies generally have the highest payout ratios, while fast growing companies tend to pay no dividends, preferring to reinvest all their earnings in fund growth. To compute the payout ratio, use the Value Line Data Base II Quarterly Reports (GO VLQTR). You can make the calculation using the quarterly earnings per share and the dividends per share figures. To quickly calculate the ratio on an annual basis, Standard & Poor's Online History Part 1 contains dividend information over the last four years.

Note that CompuServe adjusts for stock splits and stock dividends in many of its historical pricing programs. The formula used to make this adjustment in MicroQuote II is as follows: Stock split or reverse split:

AF = B/A = 1/RATE

B is the number of shares before distribution; **A** is the number of shares held after distribution; **RATE** is the ratio of shares after to shares before the distribution. Stock Dividend:

AF = 100(100 + PCTG) = 1/RATE

PCTG is the percentage of held stock that is being distributed; **RATE** is the ratio of shares after to shares before the distribution.

This adjustment is carried out automatically as a value-added service so investors don't have to make these calculations themselves. However, those who would prefer to look at unadjusted prices can use CompuServe's MQDATA program to retrieve unadjusted share prices.

Cathryn Conroy is a contributing editor of Online Today. *Her CompuServe User ID number is 70007,417.*

Could *Your* Business be Affected by Happenings in the Computer World Today?

Find out in *Online Today Daily Edition*. GO OLT-90 from any prompt on the CompuServe Information Service to get daily-updated computer news.

ONLINE TODAY

Economic Savvy: Follow Trends Online

by Carole Houze Gerber

As the economy goes, so go most investments. But because no one economic indicator tells the whole story, investors' perceptions of the economy and their subsequent investment decisions must be based on a variety of sources and statistics that, taken together, paint an overall financial picture.

However, since the economy is continually in flux, this "big picture" is forever changing. To keep up, investors must re-educate themselves regularly—a daunting task, even for the most conscientious among us. That's why many investors turn to CompuServe's news and investment services as a time- and cost-efficient source for making accurate, up-to-the-minute assessments of the economy as a basis for investment decisions. The Executive News Service (GO ENS) and MMS International (GO MMS) are two excellent online sources of valuable financial information.

ENS provides up-to-date economic news from a variety of sources, including The Reuters Financial Report, The McGraw-Hill News Service, OTC News Alert, The Associated Press and *The Washington Post*.

To zero in on economic and financial news, investors can set up an online ENS clipping folder to capture and save—for up to 14 days—selected information based on key phrases designated by the user. Each subscriber can set up a maximum of three folders, using up to seven key phrases to clip stories for each. Users can send stories to themselves or others through EasyPlex. Step-by-step online instructions explain the specifics of how to use the ENS clipping capability.

CompuServe Financial Products Specialist J. David Edwards offers the following tips for coordinating the dates for your files with the release of monthly statistical information for the previous month. "Employment statistics are released about the end of the first week of each month," says Edwards, "and statistics on housing starts and personal income are available mid-month. Information on exports and imports comes out toward the end of the month and GNP information—a quarterly statistic—is available mid-month following the end of the quarter."

Approximate Release Dates for Statistical Data

MON	TUE	WED	THU	FRI
3 • Construction Expenditures*	**4** • Manufacturers' Shipments, Inventories, Orders*	**5** • Automobile Sales • Commodity Indexes	**6** • Help-Wanted Index*	**7** • Employment
10 • Capital Appropriations	**11** • Wholesale Trade* • Interest Rates	**12**	**13** • Retail Sales • Money Supply	**14** • Industrial Prod. • Producer Prices • Consumer Credit* • Manufacturing and Trade Inventories and Sales*
17 • U.S. International Transactions • Capacity Utilization	**18** • Personal Income • Housing Starts	**19** • GNP • GNP Flash^ • Corporate Profits • Population Estimates*	**20** • Plant and Equipment^ • Consumer Price Index • Real Earnings	**21** • Housing Completions* • Advance Durables Goods Orders
24 • Flow of Funds^^	**25** • Treasury Statement	**26** • Housing Vacancies	**27**	**28** • Collective Bargaining Settlements • Composite Index • Exports and Imports
31 • Productivity • New Home Sales • Machine Tool Shipments and Orders	* For two months prior ^ For current quarter ^^ For two quarters prior Quarterly statistics Monthly statistics			

Edwards cites these additional approximate release dates for monthly statistics to keep in mind when setting up ENS files: Wholesale trade and interest rates are released on the 11th for the two previous months; retail sales and money supply statistics on the 13th; Treasury Department statement on the 25th; and new home sales on the 31st.

For a more detailed analysis of the economy, Edwards recommends looking into online information available from experts at MMS International, a multinational corporation specializing in financial and economic research. One of the world's largest suppliers of online financial forecasting, MMS through its network of market analysts, provides economic and technical analysis of the debt, currency and equity markets.

MMS's current economic information is divided into five areas: FEDWATCH, debt market analysis, currency market analysis, equity market analysis and economic briefings. The surcharge for accessing the following MMS newsletters and bulletins is $5 for each access.

- *FEDWATCH*, which is written and posted online each Friday, focuses on interest rate trends. It's available online four days before the print version is received through the mail.
- *Daily Debt Market Report*, a daily report on the cash and futures markets, also covers economic, political and market events impacting interest rates.
- *The Daily Currency Market Report*, another daily bulletin, is written after the close of the Chicago futures market and provides forecasts and analyses of market-moving forces.
- The *Daily Equity Market* provides fundamental and technical analysis of worldwide international equity, index and options markets.
- *Economic Briefings* contains forecasts and data analysis of key issues affecting the following markets: government securities, stock, futures and foreign exchange.

Business Briefs

Financial Products Surcharge-Free

Surcharge-free access is available in financial area products and services.

H&R Block, CompuServe's parent company, offers its ticker symbol, HRB, as a live demonstration of each product in the financial area. You pay only network and connect-time charges.

Type HRB at any financial area Issue or Company prompt, and read the online instructions and fees documentation to answer questions.

Autodesk Forum Reorganizes

Autodesk has reorganized its forum subtopics and libraries to provide more tailored support for subscribers' needs.

In addition, version 1.0a of AutoFlix, an animation utility, has been uploaded to Library 5. AutoFlix compiles sequences of AutoShade renderings, AutoCAD or AutoSketch slide files into on-screen movies that can be played back on a 256K EGA display. GO AUTODESK

Recommended Stocks from S&P

Two Standard & Poor's Online features, the Master List and Investment Ideas, enable CompuServe subscribers to tap the expertise of S&P analysts when looking for attractive investment candidates.

The Master List of stocks lists those favored by S&P analysts and the S&P investment committee for specific investor goals, including long-term gain, promising growth, speculation and income with inflation protection. Using your investment goals as a guide, select components from the Master List to build a portfolio for almost any purpose. Supervision of the Master List by S&P is continuous, and when conditions affecting any issue change for the worse, the stock is removed.

Investment Ideas are selected from stocks that S&P analysts expect will outperform the stock market during the next 12 months. The investment goal is active, aggressive management of a portfolio limited in size. When a stock no longer meets this investment style—or can be replaced with another that promises to better meet investor goals—it, too, is removed. GO S&P

Artists Only

Investors' Forum: Lively, Informative

When the stock market crashed last October, the level of activity in the Investors' Forum mirrored that of investors across the country. "The forum was a place to gravitate toward during the crisis. Everyone had a tale to tell," recalls Mike Pietruk, forum administrator.

Several forum members had been forecasting a stock market collapse three months before the crash, says Pietruk. "People who regularly read our bulletin board were not totally shocked by the events of Oct. 19, even if they hadn't acted on the information. Because of our broad-based membership, there's a more objective view online than you might get from the financial press."

The Investors' Forum is always changing to meet the needs of members. Investors riding the crest of the strong bull market of recent years found many resources in the Investors' Forum. Now, as the market rebounds and investors act more cautiously, the forum is still a busy center for the exchange of information, advice and theories.

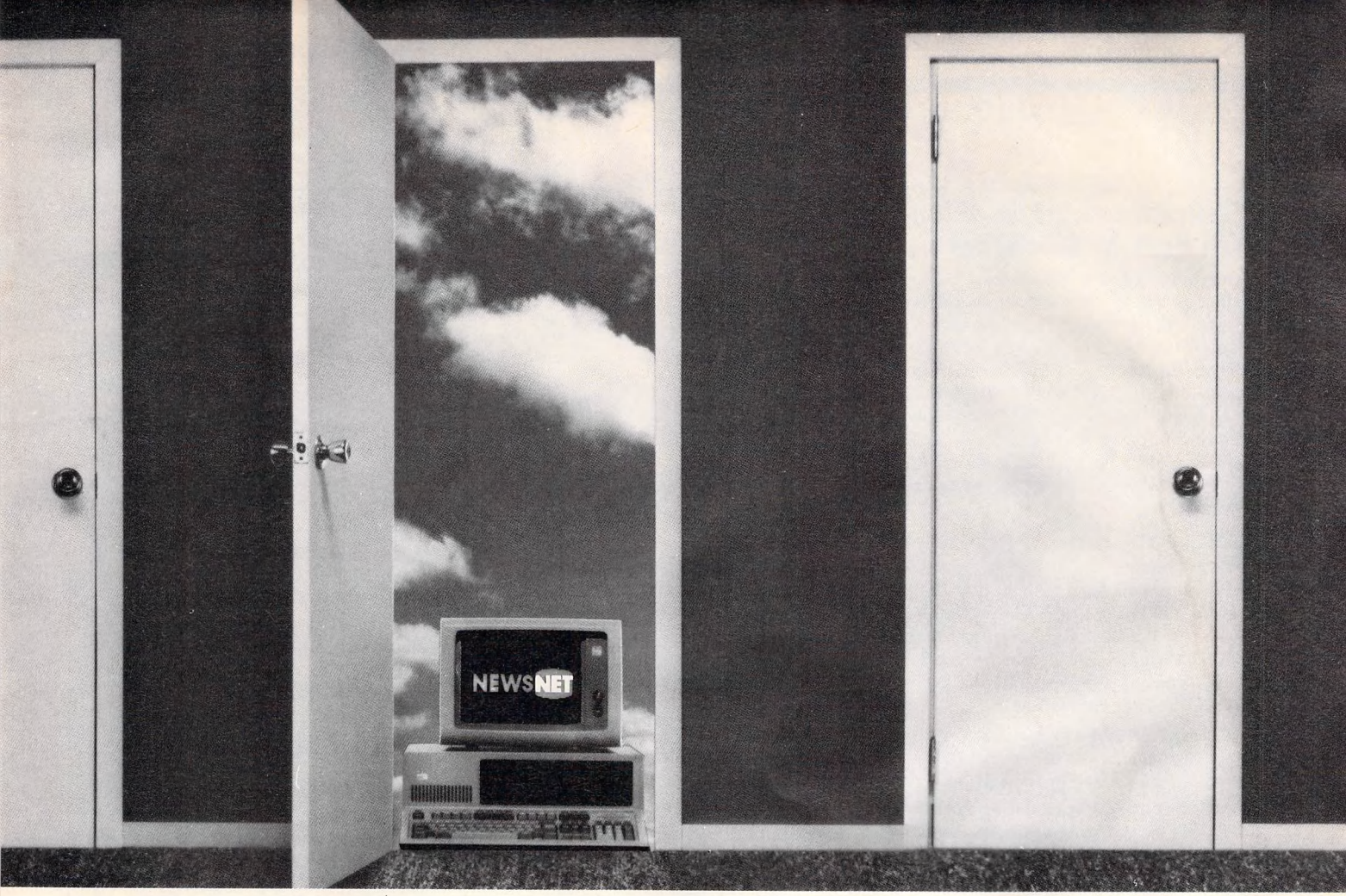
The forum membership is a diverse group, including Wall Street brokers, small investors, financial writers, business people, doctors, lawyers, bankers and accountants. All have one thing in common: They follow the stock market.

Several forum members who continually trade stocks leave messages online telling what transactions they plan to make that day. "This is what makes the forum lively," says Pietruk. "The message board is a compendium of ever-changing information. Although we cannot be responsible for the advice given online, there is plenty available."

Pietruk cautions that financial recommendations are not monitored and members' comments are not screened. Instead, he says, forum members learn to evaluate others' suggestions based on their track records. "You don't have to be a Harvard MBA or a high-powered stock broker to gain respect and have your comments taken seriously. The best way to judge others' comments is to read the message board daily and form your own opinion," he says. "I advise people not to take advice blindly. Read it and analyze it, but remember you are still the best judge of what to do with your money."

The board is also an excellent place to ask questions and receive expert answers. For instance, a member who wants to purchase a pharmaceutical stock may receive information from a physician or pharmacist in the forum—information an outsider wouldn't know. Or a question might be posed about the stock of a major automaker. "A car dealer or even an assembly-line worker might be online and mention that car production is increasing or decreasing. Often those in the industry are the first to spot trends."

Industry trends can be revealed online in small but important ways. "There's a lot of give and take here, a lot of spontaneous answers," says Pietruk. "It's this kind of personal exchange that makes our forum work. The Investors' Forum succeeds because of our members."



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GO OLI or circle 6 on the Reader Service Form.

Educational, Fun Files Fill Forum Libraries

The libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to forum libraries in recent months. For a more up-to-date list of uploads, check the "Uploads" columns in *Online Today Daily Edition* by typing GO OLT-3700 at any CompuServe Information Service prompt. New columns are added weekly.

ADCIS-NET
(GO ADCIS)

Education Software—A file that describes EPIE Institute's latest publication, the *Mini-Guide to Highly Related Software for Home Education*, and how to obtain the booklet. File SFGUID.TXT in Library 3.

AEJMC FORUM
(GO AEJMC)

Virus Report—A report from the Milwaukee Journal (reprinted by permission) on the growing concern about computer viruses and what to do about them. File VIRUS.TXT in Library 1.

ALDUS FORUM
(GO ALDUS)

PageMaker Help—Useful information on installing PageMaker 1.0 and 1.0a on Windows 2.0. Includes needed procedure for converting fonts from Windows 1.0a format to Windows 2.0x format. File INSTAL.PC in Library 3.

AMIGA FORUM
(GO AMIGAFORUM)

Micro BBS—MicroHost 1.3, a tiny BBS system for the Amiga for those who need primarily to send and receive files from work. Has password protection and a simple mail utility. File MCHST1.ARC in Library 4.

ARTIFICIAL INTELLIGENCE FORUM
(GO AIE-100)

Macintosh SCOOPS—John Ulrich's implementation of SCOOPS (a SCheme Object-Oriented Programming System) in MacScheme. File SCOOPS.SIT in Library 13.

ASTRONOMY FORUM
(GO ASTROFORUM)

Satellite Tracker—Satellite tracking programs for the Macintosh. Each file contains program, documentation and ground station data. File MACSAT.SIT is for a 512K Mac, Mac Plus, SE or Mac 2. File MSAT2.SIT is for the Mac 2 only. Both files in Library 7.

ATARI 8-BIT FORUM
(GO ATARI8)

Pattern Maker—A kaleidoscope of ever-changing hypnotic patterns from Stardust Software. File HSCOPE.OBJ in Library 4.

ATARI 16-BIT FORUM
(GO ATARI16)

Programmer's Conference—Transcript of a conference with FTL, the makers of *Dungeon Master*, *OIDS* and *Sundog*. Conference includes a discussion of *Dungeon Master*, the game's concept and program. File FTLCO.DOC in Library 8.

COMMODORE MUSIC, GRAPHICS AND GAMES FORUM
(GO CBMART)

Casino Program—A public-domain Las Vegas-style casino program for the Commodore 64. File VEGAS.IMG in Library 11.

Math Tutor—Math game with sound and graphics for the Commodore 64 and 128. Includes addition, subtraction, multiplication, division and mixed math using three levels. File MATHWZ.IMG in Library 11.

COCO FORUM
(GO COCO)

Invaders—A *Space Invaders*-type game for the Tandy Color Computers. File HAWKS.BIN in Library 3.

CoCo Database—Monster Database, holds 130 names, addresses and telephone numbers. Documentation included. File MONSTE.ARC in Library 8.

FLORIDA FORUM
(GO FLORIDA)

Disney Prices—The most current prices of Walt Disney World admission tickets and hotel rates. File PRWDW.TXT in Library 13.

INVESTORS' FORUM
(GO INVFORM)

Spreadsheet—Version of the "As Easy As" spreadsheet that reads and writes Lotus version 1a worksheets. File ASEASY.ARC in Library 10.

MAUG APPLE II/III FORUM
(GO APPLETWO)

AppleWorks Template—Stock Screen, an AppleWorks spreadsheet template to help automate stock market selections. Selective data ranking with AWKS. File STKSCN.BNY in Library 11.

MAUG HYPERFORUM
(GO APPHYPER)

Notes Stack—Notes, an address and datebook stack, has a keyword field, a notes field and buttons to control the stack. Shareware from SuccessWare. File NOTES.SIT in Library 8.

MAUG MAC PRO FORUM
(GO MACPRO)

Virus Protection—Vaccine, a control panel device for the Macintosh to provide some protection against viruses. Freeware from CR Software. File VACCIN.CDV in Library 5.

OS-9 FORUM
(GO OS9)

Backup Tools—A full set of tools for hard-disk backup, both full and incremental. Backup is done by files and not by disk image. File HDKIT.AR in Library 9.

PICTURE SUPPORT FORUM
(GO PICS)

Apple Picture Viewer—IIGIF, a GIF/RLE viewer for the Apple II series of computers. Requires 64K and ProDOS to use. File IIGIF.BNY in Library 1.

PR AND MARKETING FORUM
(GO PRSIG)

Marketing Professionals—Transcript of an online conference on "How to Market a Professional Practice" with Ron Albright, M.D. Conference was directed to the specific cardiologist's marketing problem of attracting clients. File MKTPRO.CO in Library 7.

SCUBA FORUM
(GO DIVING)

Diving Publications—A textfile containing a list of publications on diving and related topics. File is updated frequently as new publications are discovered. File PUBLIC.TXT in Library 1.

SPACE EDUCATION FORUM
(GO SPACEED)

Astronaut Specs—NASA astronaut selection information, including physical requirements for vision, hearing and blood pressure. File ASTRO.PIK in Library 0.

SPACE EDUCATION FORUM
(GO SPACEED)

NASA/Spacelink—A description of NASA/Spacelink, an information access system provided by NASA for use by educators needing space-related information. File describes how to access and use the system and what types of information can be expected. File SPLINK.TXT in Library 3.

David Peyton co-authored How to Get the Most Out of CompuServe *and* Advanced CompuServe for IBM PC Power Users. *His CompuServe User ID number is 76703,244.*

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Garry Burdick

Staying competitive means keeping current: *Denny*

Headline News in a Snap

McGraw-Hill News SNAPSHOT Responds to Business Needs

by Cathryn Conroy

To remain competitive in a business world that is tough and demanding, executives must keep on top of current events and the stock market—but who has the time?

CompuServe makes it easy with a new product from McGraw-Hill News that instantly gives the top five business headlines of the hour and key current stock market indicators. The McGraw-Hill News SNAPSHOT caters to the executive who wants a quick scan of current business news. Reports are issued hourly on the half-hour every business day from 8:30 a.m. to 5:30 p.m. EDT.

First you get a quick view of the leading stock market indicators—Standard and Poor's 500, the Dow Jones Industrial Average, the New York Stock Exchange Volume and the NASDAQ Composite.

Then, in addition to the top five business headlines, you have the option to read a one-sentence explanation or the full story. Written specifically for business professionals and investors by the McGraw-Hill News team, the articles are devoted exclusively to news that affects the business world, including company and industry news, economic news, stock market activity, regulatory decisions, industry trends and government or legislative actions as they pertain to the business community.

In addition, the McGraw-Hill News Business Calendar is published each Friday afternoon, listing important announcements (such as Department of Commerce economic indicators) and business events (such as congressional hearings) scheduled for the following week. Organized by day, the calendar can serve executives as a reminder of key events to watch over the next week. Many executives download and print it.

If the figures for industrial production could affect an investment decision, for example, you'll know from the Business Calendar when the announcement will be made in Washington. You'll also find the opinions of industry analysts as to what the announcement might be and the effect it could have. The Business Calendar will help you get organized so you can react quickly to and benefit from important business news.

Finally, the SNAPSHOT offers a quick gateway into the Executive News Service for more detailed information. All McGraw-Hill news stories, a daily compilation of more than 200 stories, are available in ENS and can be read by typing SCAN CURRENT MH or by creating a personalized clipping folder.

"The SNAPSHOT gives you an opportunity to discover the unexpected," says Julie Denny, manager of marketing and sales for McGraw-Hill News. "People tend to sign on because they are looking for something specific, but it's not uncommon to find an unexpected important news item.

"Business professionals and personal investors need to make quick decisions based on the most current information available to remain competitive in today's information-heavy environment," she says. "Having access to an easy-to-read, single-screen source of the most important business headlines of the hour helps them stay on top of the news."

To access the McGraw-Hill News SNAPSHOT, type GO MHSNAP.

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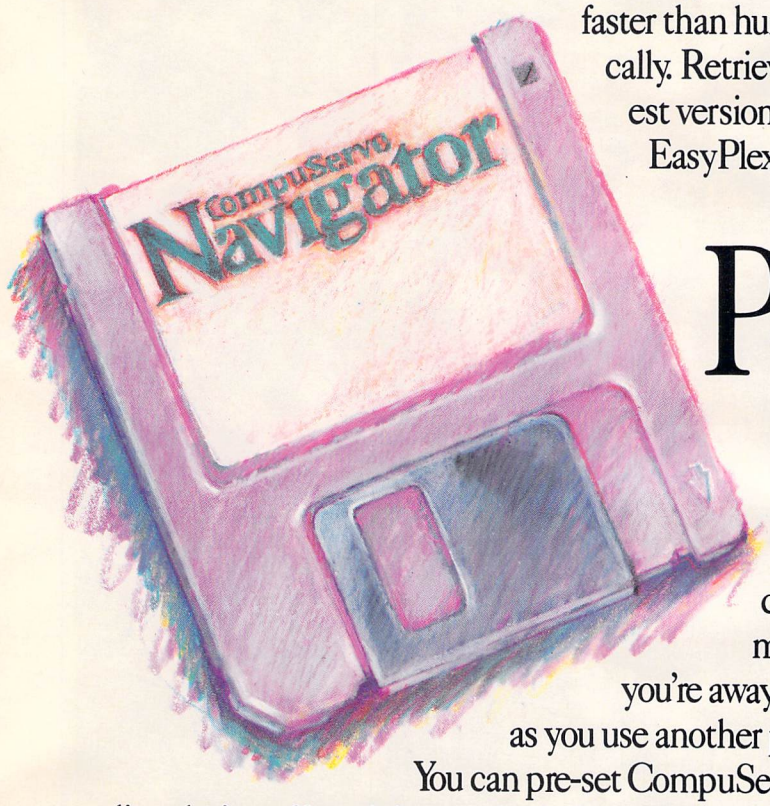

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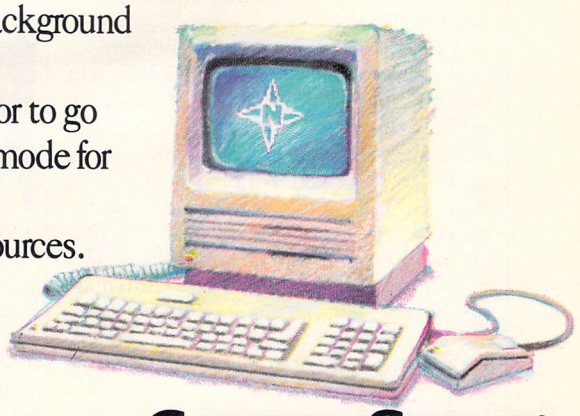

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Comb the Convention Floor with the Pros

by Cathryn Conroy

This summer's Democratic and Republican national conventions promise to be the best ever for "convention junkies" because of special *Washington Post Newsletter* coverage on the Executive News Service. Known for its expert political news reporting and editing, *The Washington Post Newsletter* will offer gavel-to-gavel coverage of the conventions with a team of seasoned writers who will comb the floors of the vast convention halls for news.

The Post will send to Atlanta and New Orleans special editing terminals, communications systems, telephone lines and courier services. News articles will reflect national and local angles with general convention coverage to rival the television networks, as well as *The Post*'s specialized, local insight from the Washington, D.C., political point of view.

"We'll cover the super delegates and the local D.C. area delegates, telling our readers what it all means and who emerges as dominant figures," says Beth Loker, *Washington Post* vice president. "We'll cover not only the candidates, but also the important people behind the scenes. This is where our strength is."

Specific coverage will include day-to-day activity reports and analysis of various events that will provide a context for what is happening on the convention floor.

Loker says that although the outcome of the Republican convention will be fairly certain long before the delegates gather in New Orleans in August, there are still many important news events to be covered. For instance, *The Post* will follow the development of the party platform, how it differs from the views of the current administration and what it means for the future. The Democratic convention, meanwhile, will be a drama unfolding with Gov. Michael Dukakis and the Rev. Jesse Jackson on stage.

Readers of the print edition of *The Washington Post* are accustomed to its specialized coverage of major news events. Stories are often printed in a special section or banner page. Now that same convenience is available in the Executive News Service through several means:

- *The Post*'s convention coverage will be listed as a separate wire code, so that by typing the command SCAN CURRENT WPC, you'll automatically receive the headlines of that day's convention coverage. (If you type SCAN CURRENT WP, you can get all the news *The Post* places online.)
- The convention coverage will be a menu choice in "Review Current News" or "Review Late Breaking News," both of which can be found on the main ENS menu.
- You can also set up a personal clipping folder, and convention coverage will be electronically clipped from *The Post* and stored online for you to read at your leisure. DEMOCRATIC +CONVENTION and REPUBLICAN +CONVENTION are probably the two best keyword phrases, but you might also want to add the candidates' names (you will get general election news as well as convention news if you do this). You can also follow a particular candidate's delegates by typing, for example, JACKSON+ DELEGAT* (which would retrieve "delegate," "delegates" and "delegation"). If you want to track the vice presidential nomination, try using VICE PRESIDEN*+ NOMINEE.

FPG International/D. Wetzstein

FPG International/David J. Maenza

Who's Up to Bat? ENS Informs Fans

by Cathryn Conroy

Moving to a new city can be difficult for a baseball fan. Long after the kids are settled in school, the job is old hat and the new house feels like home, a sports fan still yearns for news about the old team.

The Executive News Service has the latest news on every baseball team in the country. With ENS you can learn not only who won the game and all the figures and statistics baseball fans love, but also the story behind the winning home run, the latest on the coaching team, who's on the injured list and who's in a slump.

Standings can and usually do change in the second half of the season, when the pennant races start to heat up, and ENS has all the coverage in depth. The best way to read nationwide baseball news online is to set up a "clipping folder" in the Executive News Service. The procedure is simple and takes only a few minutes of online time.

First, type GO ENS. You'll be presented with a menu of four options: an introduction to the Executive News Service; a review of current news; a review of late-breaking news; and the opportunity to create, change or delete a folder. Select the last option and follow the system prompts.

Another menu will appear asking if you want to create a clipping folder, change a folder, delete a folder or list a folder. Select the option to create a folder, and you'll be prompted for a name (there is a 10-character maximum), such as BASEBALL or INDIANS (or whatever team you follow). Next you'll be asked the expiration date of the folder and the number of days you want to retain "clipped" stories (up to 14 days).

Now you'll be asked to select the publications from which you want stories clipped. The ideal source for baseball news is Associated Press Sports (Option 2 on the menu).

Finally—and this is the most difficult part—you'll be asked to list up to seven keyword phrases that the system will use in searching the daily news stories so it can clip only those of interest to you. With precise keywords that are neither too broad nor too narrow, you will get the news you want in an easily manageable form. For instance, the keyword BASEBALL will produce hundreds of unwanted stories in just 48 hours, while the name of the star pitcher from your favorite team will produce the occasional team and player stories that you're looking for.

Before you set up your clipping folder, spend a few minutes offline preparing your keyword strategy. If you want to see every story written on Ohio's baseball teams, for instance, type OHIO+BASEBALL. Other keywords might be CINCINNATI+REDS and CLEVELAND+INDIANS. If you want to know the news from just one city, type in that city's name followed by the team name, such as CHICAGO+CUBS. You can be more specific by using a player's name plus the city or team name, such as DARRYL STRAWBERRY+METS.

By typing EXPANDED+GLANCE, you'll automatically get the standings for all of the teams, as well as game times and locations, before the daily newspapers print that information.

Once you set up your folder, baseball news will be electronically deposited. As you enter the Executive News Service, the main menu will tell you how many clipped stories are stored in the folder and give you an opportunity to scan just the headlines, glance at the story leads or read the full text of all the stories.

To access the Executive News Service, you must be a subscriber of the Executive Service.

AUTOSIG, Navigator, TAPCIS:

Speeding Online Transactions for CompuServe Subscribers

by Daniel Janal

Imagine a single command that could automatically log onto CompuServe, check the latest stock quotes and download your electronic mail. Although it may sound like wishful thinking, such tools are available today.

CompuServe subscribers can choose from three programs that will automate routine tasks: AUTOSIG (ATO) and TAPCIS for IBM users and CompuServe Navigator for Macintosh users. These programs make CompuServe easier and less expensive to use.

They automatically call the local CompuServe, Telenet or Tymnet number and type in your CompuServe User ID number and password. While some commercial programs also perform those functions, these programs were written specifically for CompuServe and take advantage of the forums, databases and electronic-mail services with special commands that accelerate online transactions.

For instance, these programs read, upload and download messages, message threads and marked messages in the forums; print and download lists of new forum library files; transmit and receive electronic mail; and receive stock quotes and other data from information databases. All programs save information to disk, to be read at your leisure. If you respond to a message, the programs transmit your letter to the sender.

Although these programs offer similar features, each also has unique capabilities.

TAPCIS offers a full-function editor that uses WordStar and WordPerfect commands, and tracks time and service charges.

"ATO uses the best features of mainframes and micros to form a 'seamless' operating environment that takes advantage of the best points of each," says Don Watkins, administrator of the IBM Communications Forum.

Navigator was written specifically to take advantage of the "point-and-click" interface on the Macintosh. "Some Macintosh users were frustrated at having to revert back to a command-prompt interface once they logged onto CompuServe," says program author Michael O'Connor. "With Navigator, there are no CompuServe commands to learn."

Enhancements to AUTOSIG and the CompuServe Navigator

by Joe Noethlich

AUTOSIG and the CompuServe Navigator now include and support these additional features:

AUTOSIG

- Supports Quick B Protocol, which enables you to upload and download information to and from CompuServe in as little as half the time it takes using B Protocol. Quick B varies the amount of information it sends or receives, so transfers are faster and more efficient.
- Offers a 43-line-display mode for EGA and VGA users. This expanded display capability enables you to read, write and edit information faster, because more information is available at one time.
- Offers a new script language (sometimes called OZZIE), which enables you to further customize the automated actions AUTOSIG performs. This language contains over 30 verbs and is "free form," so it does not limit the actions you can specify. Also, the language provides "hooks" that can access the AUTOSIG main configuration file, where your User ID number and password reside, so you need not include this information in a particular script.
- Features a new script generator (BRO) that scans through a listing of library files for names that match the characters you've specified. BRO can then mark files to download and generate the script to perform those tasks.
- Enables you to cut, paste, move and delete information within AUTOSIG, so you have more flexibility when you create messages offline.
- Captures all kinds of information online, so you can read it offline (forum announcements, for example, which alert you to upcoming events). And since AUTOSIG saves the information to your disk, you need not worry about the amount of RAM available.

The Navigator

- Automatically searches CompuServe's financial services. You simply enter Ticker Symbols (or ask the Navigator to look them up), and/or request CompuServe's Market Snapshot (GO SNAPSHOT), then specify the time schedule you want, and the Navigator will perform the online searches unattended.
- Shows an icon-sized "face" of the sender when you read messages, if you have his or her "face" file in a folder on your disk. And the Navigator's new "Edit a Face" feature enables you to draw an image of your face, so others can see it, too.
- Offers branching and conditional expressions in its scripting language. These features enable you to further customize your online sessions and to explore areas of CompuServe where the Navigator could not previously go when running unattended.
- Enables you to specify the names of eight files on your disk, so you can append online messages to the file you choose.
- Automatically finds the names of forum sections and libraries in each forum. It even updates those names, if they change.
- Offers commands on a new Search Menu that enable you to find any CompuServe forum by entering a portion of the forum's name. You can also search an online-session log file to find messages that contain words or phrases you specify.
- Offers laser fonts, so laser printing is faster, and more point sizes, so you can enlarge text when you want to.
- Provides more CPU time to other applications running concurrently under MultiFinder, without substantially reducing its own performance. This should enable concurrently running programs to respond faster.
- Provides the option to exit the Navigator program after it completes an automated online session. For those using a Mac II, you can even have the Navigator shut down your computer.

Saving Time and Money

Because the programs are automated, they maneuver the systems faster than any person can. Less time online means saving money.

"Time saved depends on how much 'think time' the user spends online, especially time composing messages," says Howard Benner, TAPCIS author. "If it takes a user 10 minutes to write three messages online, TAPCIS could log on, deliver messages composed offline and log off in less than a minute. That would be a 90 percent reduction in time and charges."

He sees an even more important advantage to the time-saving techniques: "Most users find that the program so simplifies the use of CompuServe that they're branching out into new areas of the service."

O'Connor noticed that many users change the way they use CompuServe once they use navigator programs. Instead of gathering the text of all messages in a forum, many users save money by asking for a message summary that can be reviewed offline. After reviewing the messages, a user can ask the program to log on and download selected messages.

"When the session is run, Navigator handles it automatically, as fast as possible," says O'Connor. "If you find yourself composing messages or replies online, or fumbling around trying to figure out what command to give next, Navigator could save tremendous amounts of connect time."

Easy to Learn and Use

Even though the programs have so many features, the authors say the programs are easy to learn and use.

"Many users run TAPCIS immediately using just the context-sensitive help screens. This is especially true of people already familiar with CompuServe," says Benner. "The program covers virtually all forum and EasyPlex capabilities and does its best to shield users from the need to write scripts or study CompuServe navigation."

Scripts are a series of commands the program is instructed to perform, like DOS batch files. A sample script asks CompuServe to do several tasks, such as read messages and save them to disk.

"Scripts are fairly easy," says Watkins. "Examples are provided in the documentation and just about any user should be able to write them. ATO requires no knowledge of forum commands for the writing of scripts. Everything is pretty much load and go.

Floyd Dean Inc.

Save online time, reduce charges: *Benner, TAPCIS author*

"There's a lot to ATO, but in general the basics are easy to learn," he says. "All that's necessary is that users follow the manual to change certain options in each forum."

Navigator is meant for non-programmers, who can do everything with the standard point-and-click methods other Mac programs use, according to O'Connor.

Support

All programs are supported by their authors and other users in various forums. TAPCIS advice is available in the new TAPCIS Forum (GO TAPCIS).

The IBM Communications Forum (GO IBMCOM) is the help center for ATO.

Navigator support is available by leaving messages in the Macintosh Personal Productivity Forum (GO MACPRO) or in the customer support area (GO FEEDBACK).

All programs, updated periodically, are based on user's comments and requests.

Ordering

ATO is free and can be downloaded in Library 1 of the IBM Communications Forum. Help files are also located there.

CompuServe Navigator costs $59.95 and can be ordered electronically through CompuServe (GO ORDER).

TAPCIS costs $79 and carries a 90-day, money-back guarantee. TAPCIS can be ordered from Support Group Inc., P. O. Box 1577, Baltimore, MD 212031, or by calling 1-800-USA-GROUP for MasterCard and VISA orders.

A complete evaluation copy and documentation are available for downloading and evaluation in the TAPCIS Forum. Those using an evaluation copy for more than 21 days are obligated to pay for the program.

Daniel Janal is president of Legal Computing Systems, a training and consulting firm in Fort Lee, N.J. His CompuServe User ID number is 76004,1046.

Consultants Meet, Rally Online

by J. Scott Orr

In 1982, things were pretty slow for the private forum sponsored by the International Computer Consultants Association. Early members exchanged tips and information, but they weren't a strong force in the consulting industry.

Even after the forum opened to the public and changed its official title to the Computer Consultants Forum, users weren't burning up the lines to GO CONSULT.

But since 1987, the forum has more than doubled in size, with many stopping by on a regular basis. A remarkable majority of the forum's activity is message-based, a testament to the up-to-the-minute informational needs of computer consultants.

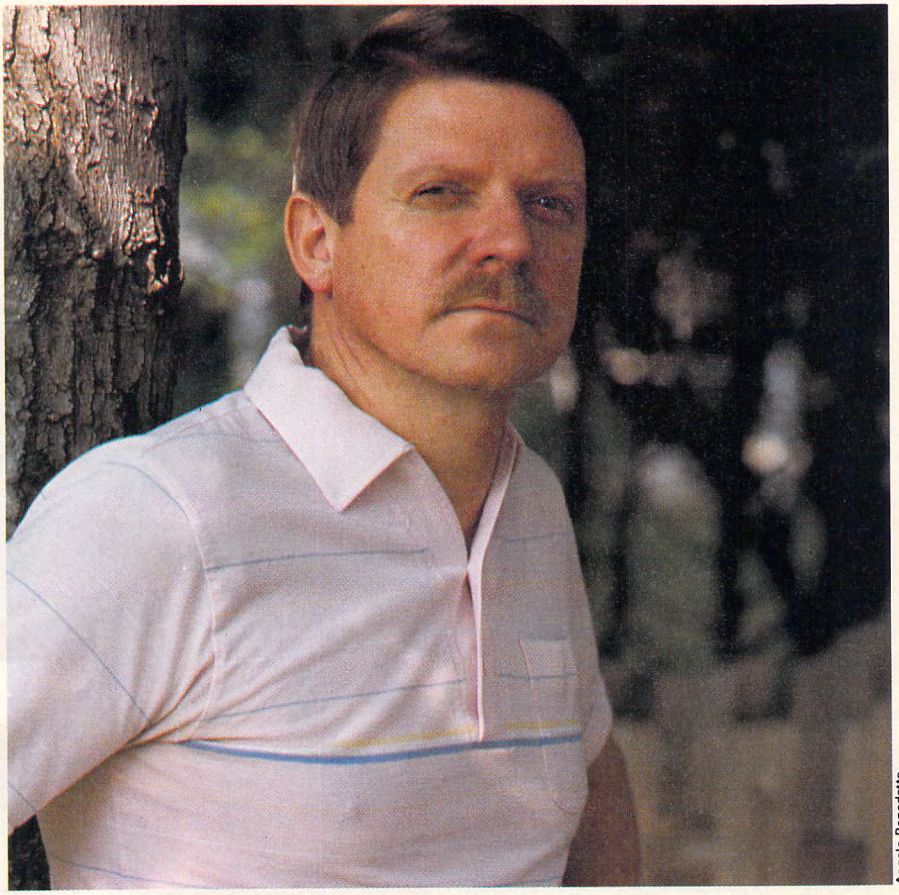
"We started slowly," admits Nick Cvetkovic, the forum administrator. "But today, the forum is active—the scene of lively debate and information exchange. It is the only network I know of where computer consultants can interact with a large number of their peers," he says.

The Computer Consultants Forum is a forum for the little guy—consultants working for themselves, free-lancers or those associated with smaller companies. According to Cvetkovic, the forum provides the kind of support services and professional give-and-take consultants employed by large technical-service firms get on the job, such as information on software, hardware and rates, plus ideas and tips. Consultants share information freely in the non-competitive atmosphere of the forum.

But despite the open flow of information, Forum Administrator Paul Ferrara says there is no shortage of opinion, debate and argument.

"Members of the forum are not afraid to speak their minds. Sometimes it gets pretty hot," he says, adding that the forum is invaluable to those starting out because it gives them access to a vast pool of experience. "Some of the consultants who stop by are well known in their fields, some of the top experts in the business—not household names, but some of the most respected professionals in the consulting field—are known to drop by," Ferrara says.

Like Cvetkovic, Ferrara is pleased by the recent expansion of the forum. But what turned this once sleepy little private network into the nation's premier source of information for small computer consulting firms? According to some, it took an act of Congress.



Angelo Benedetto

Lively debate in Computer Consultants Forum: *Cvetkovic*

Last October, Congress threatened to permanently alter the landscape of the small-firm computer consulting field.

It was past midnight when Sen. Daniel P. Moynihan (D-N.Y.) stood before a handful of his colleagues and offered section 1706 to last year's sweeping reform of the nation's tax code. Several weeks later, the ICCA and computer consultants across the country found that they were being stripped of the tax advantages that allowed them to stay in business.

"The effect of this was to put the little guys out of business," says Jeff Sachs, president of the ICCA. According to Sachs, section 1706 prevented consultants from doing business through a broker or other third-party without becoming an employee of that broker. The provision eliminated all business deductions for consultants who were part of three-party contracts.

Sachs says the ICCA felt the provision was an attempt by large technical-service firms to eliminate competition from smaller firms and individuals. So far, the ICCA and the Computer Consultants Forum have not gained a reversal of Congress' action, though Sachs says it has convinced several key members to support an undoing of section 1706.

"We've even convinced Moynihan, who sponsored Section 1706, that it was a bad idea," Sachs says. In the meantime, however, the ICCA has been active through the forum in advising consultants on how to structure contracts to avoid the negative impacts of the new tax law.

But while almost everyone agrees that section 1706 is having a negative impact on small consulting firms, Sachs and Cvetkovic point out that it had the happy consequence of boosting the membership and usage of the Computer Consultants Forum. It was section 1706, they say, that put the forum on the online map.

J. Scott Orr is the Washington correspondent for the Newark Star-Ledger *and Newhouse Newspapers. His CompuServe User ID number is 70007,1165.*

NetWire Links Users to Novell Ideas

by Paul Newkirk

Novell Inc., the largest independent provider of Local Area Network connectivity software, serves more than 1.7 million users. To make the service more responsive to those users' needs, Novell provides direct support on the CompuServe Information Service.

Novell produces hardware and software to provide an integrated package used to control computers on a network that allows the sharing of information, peripherals and programs. Novell has made a business of connecting companies' computer systems, much like CompuServe connects the computers of the nation and the world.

NetWire (GO NOVELL), Novell's full-time support service, gives users a direct, timely and cost-effective link to Novell technicians and specialists. Behind this link is a company dedicated to providing solutions to its users. Says Kris Ashton, director of marketing for Novell Services, "We are committed to making NetWare installation, use and maintenance easier for Novell customers. We see NetWire as an integral part of that support."

NetWire's most popular features are the technical bulletin database, the question-and-answer message base, and the ability to download files from the forum.

The technical bulletin database provides information that can be accessed without the wait usually associated with forum bulletin boards. Novell keeps records of many of their technical bulletins and responses to problems posted in the forum in this keyword-searchable database. To find solutions to problems, try these databases first to see if your question has been answered before or discussed in a past bulletin. The keyword-search feature allows solutions to be found quickly and easily.

The Novell Forum is the place to find information in several ways. For instance, Novell posts all of its new technical bulletins, including utility programs, upgrades, patches and fixes, in this area of NetWire. The forum is also a place to post questions. Novell specialists are ready 24 hours a day to respond to questions. Each product division at Novell answers the questions concerning their product line, assuring users of the best responses to problems.

Often, though, other users might have solutions to problems posted on the board. Interested users can respond to problems and submit their own helpful programs and answers to be posted on the forum.

All responses can be downloaded from NetWire. This means that fixes, patches and programs can be received immediately from NetWire.

Novell users wanting to learn more about how to manage, maintain and support their network can find a section on NetWire devoted to classes and class scheduling. Lists of the classes, descriptions, scheduling information and costs can be found in this section of NetWire.

New users should note that NetWire carries a surcharge. NetWire is staffed with Novell technicians and is not merely a user's forum. It is a full-service support system that includes a forum.

Other menu choices include descriptions of NetWire, company and product information, and a list of what is new on NetWire.

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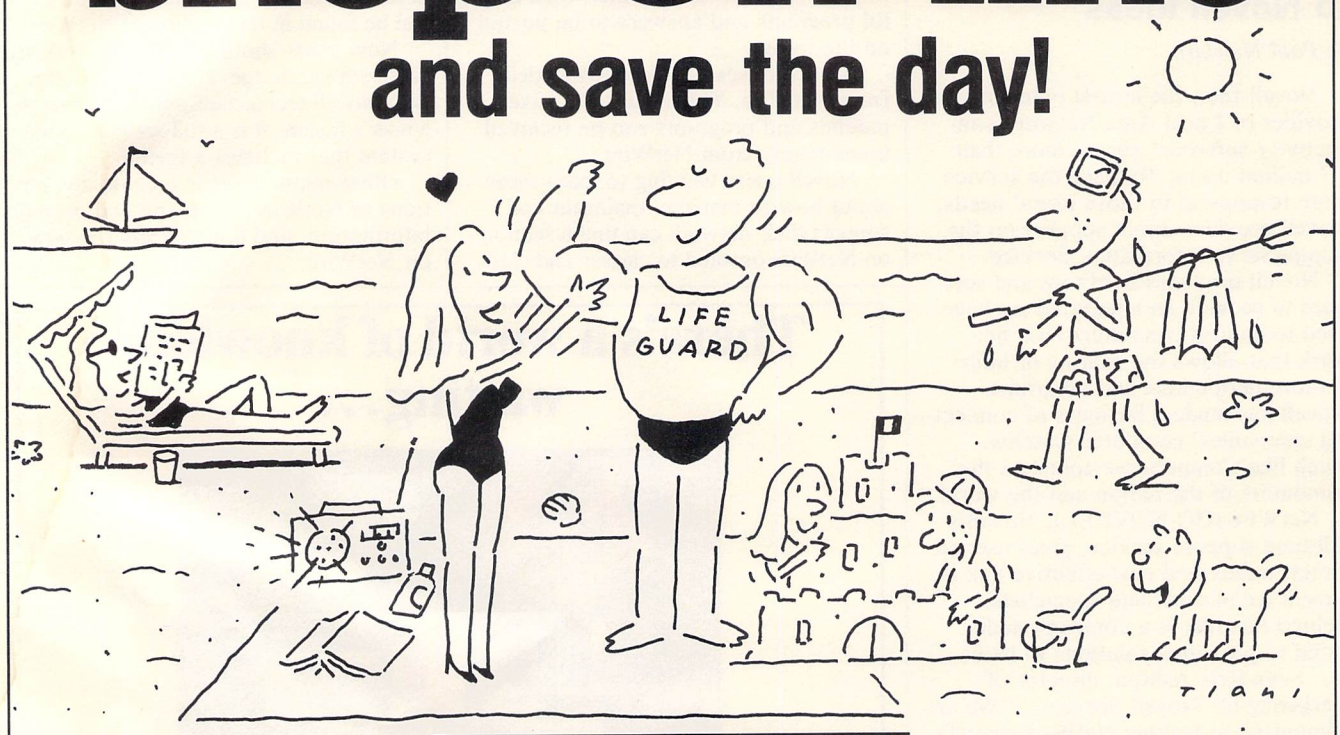

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- **Lowest-price guarantee.** If you can find a lower price on an item you buy from us, we'll refund the difference.*
- **Double warranties.** You can double the manufacturers' warranty up to one year at no additional cost.*
- **Free catalogs.** We'll keep you informed about our latest "Best Buys" and exciting additions to our database of fine products!
- **Enroll today.** Sign on to CompuServe and enter **GO SAC** to have full membership privileges for 3 months for just $1. Then, unless you notify us, we will continue your membership and bill you for the low annual fee of $30. And, of course, you can cancel and receive a full refund at any time during the first year.

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Go Mall

A GUIDE TO COMPUSERVE'S ELECTRONIC MALL®

Y/AUGUST 1988

A Mall Beach Party

Browse prerequisites for the beach blanket brigade

Destinations: pick a beach, then make travel plans online

Best Buys: credible products at incredible prices

THE ELECTRONIC MALL®

Online auctions: interact with auctioneers, electronically

Free connect time and software at Buick Motors' Free-For-All

Summer Sale-A-Bration: win a $5 usage credit

Find your best friend at New York Kennel Club

Flash! Free shopping Mallwide on Friday, July 15th

DEAR SHOPPER

Dear Shopper,

At first, two of my favorite passions—travel and computers—seemed incompatible, but I found out otherwise. Recently I bought my second computer, an NEC Multispeed, and discovered that you can, indeed, take it with you. Now "Spot," as I've affectionately nicknamed him, goes everywhere with me. My favorite destination? The beach, of course! And with summer in full swing, Spot is always packed and ready to accompany this beach bum on her search for the perfect beach.

This issue of *Go Mall* celebrates those two passions. We invite you to kick up some sand at our Mall Beach Party. We also invite you to "pick a beach, any beach." Visit The Mall's recently expanded travel department and discover sunny destinations, both far-flung and close to home. We have a special gift for you—a free pass to any TWA Ambassador Club lounge—just for stopping by.

Why not pick up your own "Spot" to take along, too? Shopping for a laptop has never been easier than it is right now at The Mall.

To me, summer also means sales ... and The Mall has great sales for you this season, starting with the all-new Electronic Mall auctions.

Come on down! Explore the auction warehouse. Bid on everything from software to sportswear to "pink elephants."

Throughout The Mall, we'll reward the first 250 shoppers who make a purchase of $35 or more with a $5 connect-time rebate.

We're also celebrating the grand reopening of Shoppers Advantage℠—a discount shopping service for members—on The Mall this month. Literally thousands of items, all at incredible savings, are now at your fingertips.

Finally, with this issue, we're introducing a new column, "Best Buys." Browse it for some of the most enticing deals The Mall has to offer. It's summertime, and the shopping is easy when you GO MALL.

Enjoy!

Electronically yours (and beach bound),

Cindy Morgan

GOINGS ON

Do a friend a favor and receive a free gift. From R+R Direct.

If you've been satisfied with R+R Direct's products and service, then do a friend a favor and get a free gift for yourself in the process! Simply suggest the name of a friend whom you think would benefit from the latest R+R Direct catalog of computer products and supplies. A convenient online form makes it easy. As a token of appreciation, R+R Direct will send you a handy Presto letter opener.

And if you haven't yet ordered your free copy of R+R Direct's catalog, why not do it today? It's packed with the absolute latest in computer technology and supplies, all at substantial savings. GO RD

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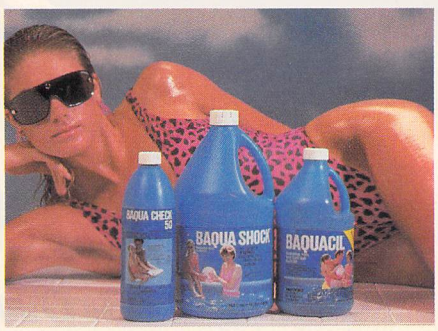
Get wet with Rin Robyn.

Pool owners, be sure to make a stop at Rin Robyn Pool 'N Patio and receive a free gift for the asking. While visiting, browse Rin Robyn's online catalog. You'll discover dozens of practical—and some very whimsical—items especially for pool owners.

Consider a floating backgammon game, a super combo volleyball game or a super pro water basketball game for daytime fun under the sun. Or order floating pool and patio candles for a midnight dip. Add to the atmosphere with the Sonic Buoy, a waterproof AM/FM radio.

For those who prefer the pragmatic, Rin Robyn offers beach chairs, floating rafts, swimming aids for children and a complete line of Baquacil™ chemical products.

Dive into their database today. And don't forget to request your free gift! GO RR



THE ELECTRONIC LETTERBOX

The game of love.

Dear Walter Knoll:

The flowers you sent to Newark for me on Valentine's Day arrived on time, but I didn't get a thank-you from the lady ... no fault of yours! She quit her job, and I haven't heard from her since.

But the lady from Philly received hers and was ecstatic. She loved them, and thought I was the most wonderful and thoughtful man alive. Now it's *l'amour.*

From now on, you're my favorite Mall merchant. You have my hard-earned thanks and my check for the roses (naturally).

Craig C.
Jersey City, N.J.

Live ... from Japan.

Dear Mall Manager:

I am calling from Japan. I bought Vitamin C at GNC by your suggestion. Thank you very much. Today I want to shop for a golf ball. Please advise. Thank you. I await your suggestions.

Katsuhiko K.
Hiratsuka-Shi, Japan

Go Mall

***Go Mall*, July/August 1988**
Volume 2 Number 4

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COMING ATTRACTIONS

It's a Summer Sale-A-Bration!

It's summertime. Time to be out and about in the sun. And that's a breeze when you shop The Electronic Mall. Enjoy summer savings ... connect-time rebates ... contests ... online auctions and much, much more.

Let the bidding begin.
Practice your bidding techniques at The Mall's summer auctions.

For your convenience, browse the Auction Warehouse—open 24 hours—in advance, to preview merchandise that will appear on the block. Then consult the Auction Board for the exact time that each item will be up for bid.

Pick up a pink elephant.
Periodically, our online auctioneers will auction off "mystery items." They'll tell you the list price of each item, and they may give you a clue or two, but the identity of each "pink elephant" will be unknown.

For complete details on how to take part in The Mall's all-new summer auctions, GO BID.

Summer sales and savings.

This summer, The Mall is bursting with special sales and savings. Take a slow stroll through The Mall morning, noon or night. We think you'll be surprised at how much you can save on everything from software to sportswear ... from cameras and electronics to gourmet food and drink ... from online club sign-ups to discount travel services.

Best buys.
Start with "Best Buys," a variety of merchandise on which prices have been slashed. Save a large sum on items ranging from steaks to cordless telephones. Next, visit Shoppers Advantage. This members-only, discount shopping service puts thousands of brand name items at your fingertips, all at steeply discounted prices.

Remember, many Mall merchants routinely run special monthly sales as well. Pay a visit to Software Discounters of America, Coffee Emporium and Crutchfield to see what's on sale this week.

And, of course, there are some stores where prices listed online are always way below retail. If you haven't visited recently, now's the time to scan the incredible savings at MaryMac Industries, Music Alley Online and Apparel Concepts for Men, among others.

Free catalogs. Free gifts. Super savings on virtually everything under the sun. It all awaits you when you GO MALL.

Earn a $5 rebate.

As part of our Summer Sale-A-Bration, we'll reward a $5 connect-time rebate to the first 250 shoppers who purchase $35 or more in merchandise at The Mall, beginning July 1. If you qualify, we'll notify you via EasyPlex and issue your usage credit. Simply GO MALL.

Talk to the auctioneers.

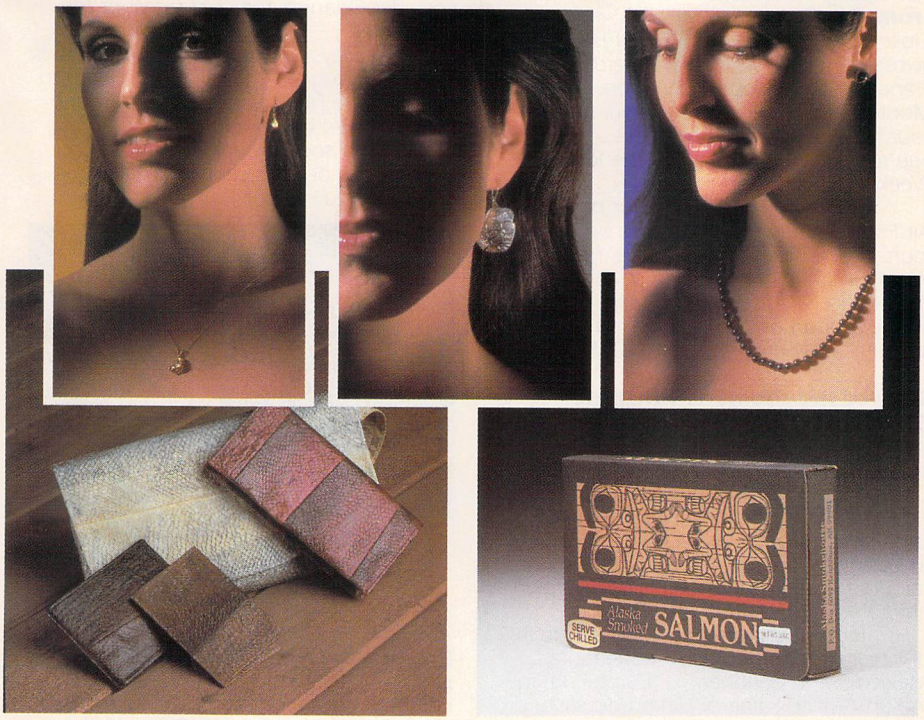
On opening night, July 15, banter online —live—with an auctioneer through CB during auction hours, 8 p.m.–midnight, EDT.

This summer, the auction block will be open the following dates:

July 15–17
July 22–24
July 29–31
August 5–7

GIFTS & COLLECTIBLES

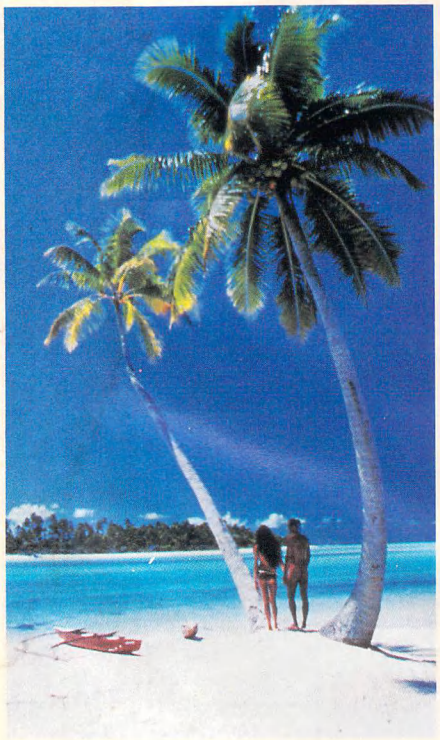
Works of art.
Hand-crafted and specialty items ... one-of-a-kind and limited edition works of art by award-winning artists ... photography, woodwork, and glasswork. Featured items include Wilton Tifft's limited edition *Ellis Island Threshold to the Dream* portfolio ... traditional and classical stringed instruments by Dennis Dorogi ... stained glass by Jeffrey Speeth. From Some Things Special. GO SP



Alaskan treasures.
Genuine salmon leather goods, including wallets, business card holders and an address book ... gold, ivory, jade and hematite jewelry ... one-of-a-kind Alaskan artworks ... even genuine gold nuggets. From Ivory Cache. GO IV

Destination: the beach ... the sun, the surf, the sand. Somewhere far, far away from the obstacle course of everyday life.

To get there, make your first stop The Mall's travel department—where there's a beach within reach.



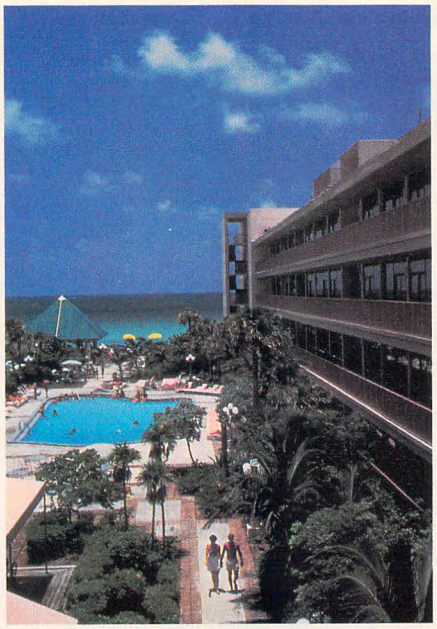
Far-flung fantasies from Air France.
Close your eyes. Picture yourself jetting across the ocean in luxury aboard Air France. Imagine your destination ... maybe Monte Carlo, Nice or even Tahiti. Book your holiday a la carte or select a package tour. Short on time? Try the Rivieran Weekend Escape.

To assist in planning your holiday, Air France offers free brochures on all tours and services , as well as a free video-lending library. Take a peek at Polynesian Paradise ... get a taste of rest and relaxation on the Riviera ... or research Monte Carlo before you go. GO AF

Spur-of-the-moment sunshine.
At any given moment, dozens of fantasy vacations and cruises, all at discount prices, await you at Moment's Notice.

Join this last-minute discount travel club, for a very affordable $45 membership fee, and get a year's worth of access to hundreds of holidays. Book at the last minute for impromptu getaways. Or plan ahead for the vacation of a lifetime.

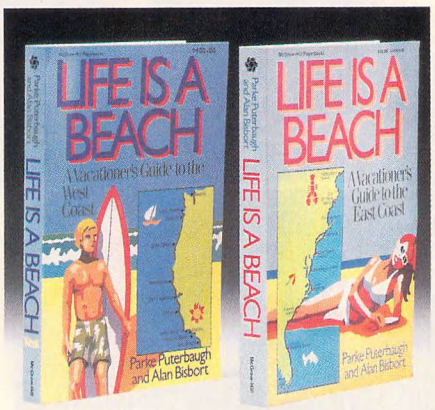
Browse the offerings online. You'll discover dozens of dream destinations ... Mexico ... the Caribbean ... Europe. Imagine an African safari or dining on sushi in Japan. Picture yourself cruising the coast of Alaska or scouting Paris or Milan for fall's fashions. GO MT



Family fun in the sun.
This summer give the kids, and yourself, a holiday to remember. Let Bargain Holidays make your reservations in Florida at any of 90 Days Inn hotels, motels or resorts in the sunshine state at specially reduced rates.

For beach seekers, try the Days Inn Lauderdale Surf or the Days Inn Ocean Front in Hollywood Beach. The latter features a swimming pool, poolside cabanas, water sports and nearby golf and tennis, all at a very affordable rate. Or consider Orlando, the Gulf Coast or the Everglades.

All Days Inns feature a special "Kids Eat Free" program that allows children to dine for free from a special menu when accompanied by an adult. Select Days Inns have a special deal for parents, too: gasoline for only 49 cents per gallon (overnight guests only). GO BH


LIFE IS A BEACH
A Vacationer's Guide to the West Coast
Parke Puterbaugh and Alan Bisbort
LIFE IS A BEACH
LIFE IS A BEACH
A Vacationer's Guide to the East Coast
Parke Puterbaugh and Alan Bisbort
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Life is a Beach, now available in two editions: *A Vacationer's Guide to the East Coast* and *A Vacationer's Guide to the West Coast*. From McGraw-Hill Book Co. GO MH

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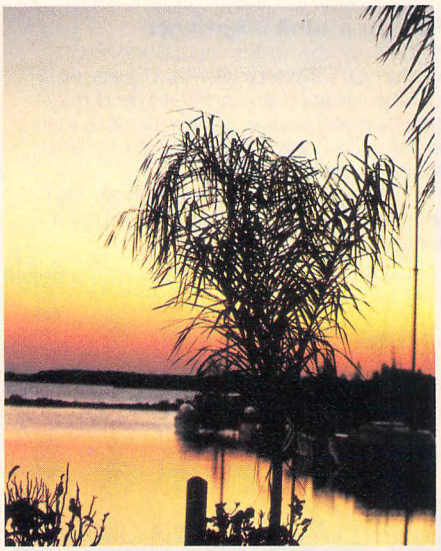
Enjoy the added advantages of kitchen facilities, privacy, space and many extras. Whether it's a romantic rendezvous for two or an outing for the entire family, ENDLESS VACATION TRAVEL can fill the bill. With prime resort locations in some of the most popular recreational resorts in the continental United States—such as the Pelican Resort and Casino in St. Martin and the Maui Sunset Resort in Maui, Hawaii—ENDLESS VACATION TRAVEL has a vacation spot for you.
GO EV



Win a trip to Bermuda.
Beginning Aug. 1, all subscribers have a chance to win a trip for two to Bermuda at Shoppers Advantage. For details, and for your chance to win this dream holiday, GO SAC.

Discover the only way to wait. And get a free gift for stopping by.
The Mall and TWA have free gifts for the first 1,000 shoppers who visit our newly expanded travel department during the month of July.

It's a complimentary pass to TWA's Ambassador Club®, valid at any club worldwide. When you're waiting to take off, you can relax in comfort. Enjoy complimentary coffee, soda and snacks. Make phone calls or watch television. The TWA staff on hand will issue your boarding pass and keep you apprised of your flight's departure. We think you'll discover it's the **only** way to wait at the airport.

To claim your free pass, simply visit The Mall's travel department and fill in the electronic winner's form. If you're one of the first 1,000 shoppers to do so, your complimentary pass will be mailed to you automatically. Entries will be accepted beginning 12:01 a.m., July 1.

BEST BUYS

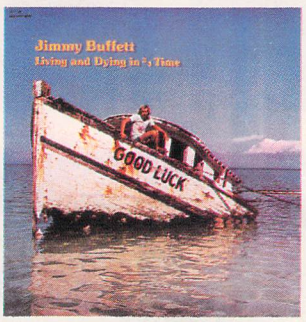
In every issue of *Go Mall*, we'll present the pick of the lot in Best Buys. We think you'll agree that these items are phenomenal values. Happy savings!

New! Blazer Star 2 Laser Printer
Emulates the HP Laser Jet Series 2, the Epson FX80, and the Diablo 630. Prints full-page text and graphics, with one megabyte of RAM on board.
From Music Alley Online. GO MAO
List price: $2,195
$1,650

AT&T Cordless Telephone
Features tone/pulse dialing, redial, voice volume control and a built-in security system. Model #3400.
From Shoppers Advantage. GO SAC
List price: $109
$59

Star Trek IV Video
Supplies are limited. Special order through EasyPlex. Details are online at the store.
From Magic Castle Video. GO MV
List price: $29.95
$19.95

GTE 6000 Answering System
Features voice-activation, beeperless remote and one-step playback. Model #6000.
From Shoppers Advantage. GO SAC
List price: $69
$49



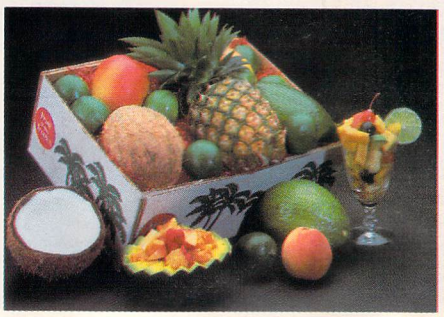
Jimmy Buffett CD Bonanza
Changes In Attitude, Changes In Latitude
White Sportscoat, Pink Crustacean
Last Mango In Paris
Son of a Son of a Sailor
Living and Dying in 3/4 Time
Coconut Telegraph
Havana Daydreamin'
One Particular Harbor
Riddles In the Sand
Somewhere Over China
From Express Music. GO EMC
List price: $13.98
$8.98 ea.

R+R DIRECT™
A DIVISION OF THE REYNOLDS AND REYNOLDS COMPANY.

Save $151 with the FAX at R+R Direct.
Buy The Amazing Complete FAX™ Board for $499 and get The Complete Hand Scanner™, a $249 value, for only $98.

The Complete FAX runs in the background of your personal computer, so while you work on a spreadsheet or database or word processor, The Complete FAX can receive and send files automatically. From R+R DIRECT. GO RD

The MG510 Casio MIDI Guitar
From Music Alley Online. GO MAO
List price: $899
$579



The Tropical Luau
A luscious assortment of avocados, pineapples, Persian limes, coconuts, oranges and grapefruits.
From Florida Fruit Shippers. GO FFS
List price: $27.95
$24.95

Brother Electronic Typewriter
Features 4000-character memory, word-speller dictionary, "find" features and more. Model #AX24.
From Shoppers Advantage. GO SAC
List price: $249
$149

Ten 12-oz. USDA Choice Midwestern Sirlion Strip Steaks
Great on the grill!
Bonus: save 10% on all steaks at Simon David during July (excluding Midwestern Sirloins). GO SIM
List price: $92.50
$83.30

PanSon: your one-stop electronic emporium.

PanSon Electronics is your one-stop source for all electronic products, needs and supplies. If you're looking for a part with which to repair your Panasonic receiver ... in the market for a new radar detector ... or just out of batteries ... PanSon is the place.

For more than 25 years, PanSon has served electronics dealers and service centers. Today, PanSon is the largest independent parts distributor in the United States, with more than 2 million parts in stock and ready to ship. Now, The Electronic Mall connects you, the consumer, directly to PanSon.

Shelves that are stocked.
On-shelf availability for thousands of different parts, from virtually every major manufacturer, is at your fingertips. Also featured is a wide range of electronic product accessories including audio/video, intercoms and accessory items from brand name manufacturers, such as Sony, Hatachi, JVC, RCA, GE, Sharp, Quasar and Panasonic.

Discover the many advantages of shopping PanSon online ... accurate, rapid shipping ... consistent, low-cost pricing ... a computerized search service by model number ... attractive incentive programs.

This summer, for example, there's no need to run out of batteries for your camera or flashlight, or tapes for your Walkman®. Simply become a member of PanSon's Eveready® Battery and Tape Club and keep the juices flowing.

Browse PanSon's online catalog of new and perennially popular products. Also featured online every month are PanSon's Price Busters, a selection of items discounted specifically for you, the CompuServe subscriber.

500 free catalogs.
Subscribers can also order a copy of PanSon's complete *Electronics and Supplies Catalog* online. It's more than 200 pages of chemicals, printed circuit materials, tools and service aids, micro tools and connectors, switches, plugs, jacks and cable ties, installation hardware, video accessories, computer accessories and more.

As part of a grand opening celebration, this invaluable shopping tool, regularly $5.00, is free to the first 500 shoppers who visit PanSon at The Mall.

Free shopping once a month.
Additionally, PanSon is pleased to announce free shopping at its Mall store the first weekend of every month. Visit PanSon monthly to discover what's new in electronics ... what's on sale any month ... what's offering incentives.

Mark your calendar now for the first weekend of free connect time: the weekend of Saturday, July 2.

Get wired! Visit PanSon today. GO PS

PanSon's grand opening, free connect weekend: July 2 and 3.

Crabtree & Evelyn: a garden of earthly delights.

A garden of earthly delights awaits you at Crabtree & Evelyn's online boutique. A tantalizing collection of toiletries, edibles and gift-packs—showcased for your shopping pleasure—make gift-giving a statement of taste.

Shimmering scents.
Indulge someone special with any of Crabtree & Evelyn's scents. Camomile and heather ... henna and jojoba ... lilac, rosemary and peppermint. These are just a few of the scents from which you'll select. From shaving requisites to soaps, from shampoos to lotions ... for men and ladies alike, Crabtree & Evelyn will please.

Tastes that tease.
Tempt the tastebuds, too, with a selection of biscuits and cookies, honeys and jellies, or English mustard and chutneys. Consider bonbons or Belgian chocolates. Try apricots, cherries, peaches or pears soaked in amaretto. Each packaged gourmet delight looks too good to eat, but will that stop you?

Make Crabtree & Evelyn your primary source for gifts that are as unique as they are functional. Browse the online catalog, or order a copy of Crabtree & Evelyn's beautiful print catalog—a collector's item itself.

Take a walk through the garden of Crabtree & Evelyn. GO CR

Crabtree & Evelyn's grand opening, free connect day: July 24.

Find your best friend at New York Kennel Club.

Looking for a pedigree puppy? Unsure just how to housebreak your new dog? Need advice on canine nutrition? Looking for the ultimate in pet products and supplies? Dog owners, and anyone who'd like to be a dog owner, visit New York Kennel Club, a new merchant on The Mall.

Everything for Rover.
Featured online is a wide selection of products for your dog—virtually everything you'll need to keep him healthy and happy. Canine shampoos, including flea and tick varieties; aloe vera tearless puppy shampoo; and Bye-Bye Tangle shampoo ...Wee-Wee housebreaking pads ... coat and skin conditioners ... stain removers ... specialty dog foods ... leashes, collars and much more.

Get registered.
If you're currently a dog owner, you can register your dog with the New York Kennel Club. The registration, which costs only $10 for a lifetime membership, can be completed online. Once you and your pet are members of the club, you'll enjoy a wide range of lifetime services, including:

- Free "dog find" service. Access to a toll-free number should your dog ever be lost.
- Access to information on the New York Kennel Club's Training Program.
- Free information, either downloaded or on hardcopy, on everything from house training to biting ... from jumping to showing.
- A monthly newsletter with up-to-date information on new pet products, discount coupons for pet food and feature stories.

Just a pup.
For those on the hunt for a pedigree pup, New York Kennel Club offers a Nationwide Puppy Search. For only $5, refunded when you purchase your puppy, New York Kennel Club will locate any registered breed of dog for you. Chihuahuas and Shar Peis ... Great Danes and Afghans ... cocker spaniels and boxers ... miniature Pinschers and Australian cattle dogs.

Whatever your puppy penchant, New York Kennel Club will locate your best friend.

For a free brochure on New York Kennel Club services, GO KC.

New York Kennel Club's grand opening, free connect day: July 3.

Don't stall. Come to Shoppers Advantage℠ reopening at The Mall.

Imagine saving up to 50% on over 250,000 different products without ever leaving home ... comparing features and prices on competing brands easily and conveniently from your personal computer ... enjoying double warranty protection on virtually everything you purchase ... even winning a $1,000 online shopping spree.

Now it's possible through Shoppers Advantage. Formerly Comp-u-store OnLine, Shoppers Advantage has moved to The Mall. A discount shopping service for members only, Shoppers Advantage gives you instant access to some of the lowest prices in America. Products such as VCRs, cellular phones, sporting goods, microwaves, cameras and china. Brands like Leading Edge, Hayes, Lenox, Sony and Wedgewood. All are showcased online at prices that must be seen to be believed.

Free connect time and a super trial membership offer.

Shoppers Advantage is celebrating its grand reopening in a big way, including two full days of free connect time on July 1 and July 2.

Discover how it works ... browse the seemingly endless selection of products ... check the Bargain Warehouse for unbelievable buys ... take advantage of Shoppers Advantage's limited-time-only grand reopening special: three months of membership for just $1. You can sign up electronically, of course.

After your three-month trial, you'll be billed for a low annual fee of $30, unless you notify Shoppers Advantage. Cancel your membership at any time and receive a full refund of this year's fee. What's to lose?

Win a $1,000 shopping spree or a Sony Watchman®.

Shoppers Advantage℠

ON THE ELECTRONIC MALL®

During Shoppers Advantage's grand reopening celebration, subscribers also have the chance to win valuable prizes in two special contests.

First, test your skill in an online Scavenger Hunt anytime June 27 through July 4. Follow the clues to solve the puzzle and you could win a Sony Watchman! In addition, you'll have the opportunity to enter a sweepstakes for a $1,000 online shopping spree in Shoppers Advantage between those two dates. Imagine being turned loose in that database with $1,000 to spend!

It's all part of the grand reopening celebration. Mark your calendar now—don't miss out!

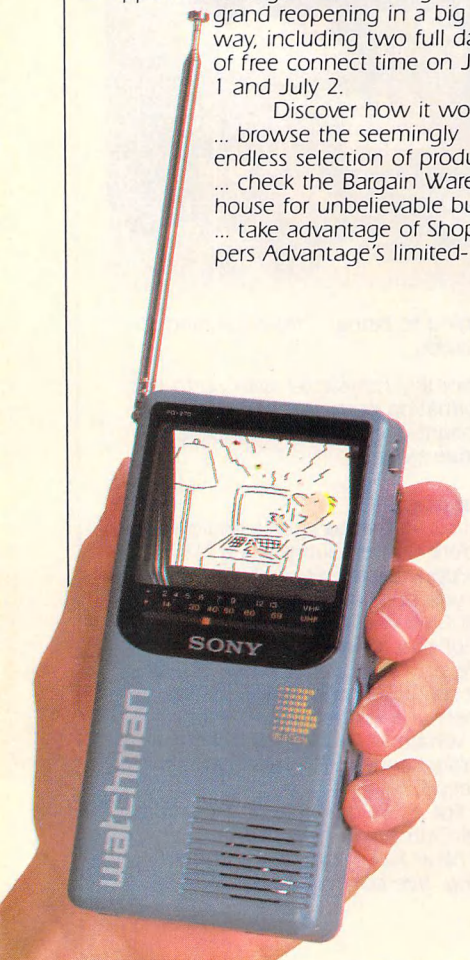
Summertime ... and the shopping is easy and convenient.

With the opening of its new, expanded Mall store, Shoppers Advantage has made shopping and ordering easier than ever. The Department Store is organized in convenient categories. Or, if you already know product codes, you can shop directly from "Expert Shopper," a selection for veteran shoppers from Shoppers Advantage's top menu. A new double warranty protection feature, on virtually every product you purchase, gives you added peace of mind on top of substantial savings.

Shoppers Advantage's navigational commands have also been simplified and are now very similar to CompuServe's commands. Type "help" anywhere in Shoppers Advantage for a full list of revised commands.

Join today and start saving on everything from sailboards to bicycles ... from ceiling fans to fishing gear ... from power tools to swimming pools. GO SAC

Shoppers Advantage's grand opening, free connect weekend: July 1 and 2.



Break the language barrier with TII.

In today's corporate environment, translations of correspondence, documents and legal contracts are becoming a vital part of international business.

Perhaps your corporation has offices in foreign cities. Maybe there's a market abroad just waiting to be tapped. Possibly new scientific and technical information has just been released, in Finnish. A real competitive edge in the international marketplace can now be yours with TII's Translation Service.

Speaking in tongues.

This innovative new service offers you complete translations into and from all major foreign languages, including French, Spanish, Japanese, Chinese, Russian and Arabic.

All translations into English, and most translations into foreign languages, are professionally produced on laser printers from modern word processing equipment. Documents can be delivered by first-class mail, messenger, overnight delivery, on diskette, or electronically!

Computer-assisted translation software for the IBM PC.

TII also produces computer-assisted translation software for IBM personal computers. Significantly improving the productivity of corporate translation operations and

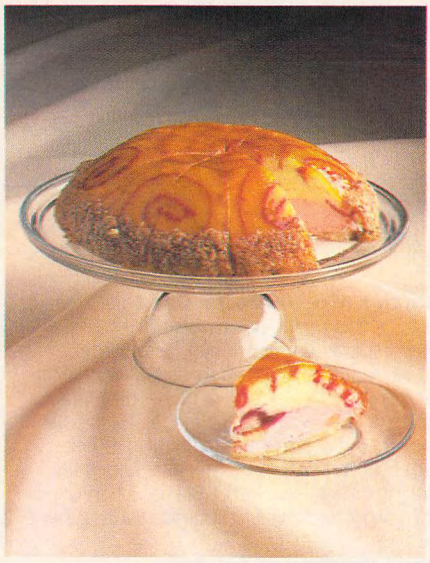
independent translators, TII translation software produces quick and accurate draft translations.

A circle of specialists.

From a flawless advertising presentation to detailed overseas market analyses of bonds, options and futures; from legal documents to personal documents; you can rely on TII's national network of translators and trained subject specialists. CompuServe subscribers are invited to request a free brochure, or a free estimate, online.

Fast, accurate, affordable fluency in foreign tongues is now at your fingertips. GO TII

TII's grand opening, free connect day: July 10.



Let them eat cake. From Desserts Direct.

Indulge your palate with a luscious selection of cakes at Desserts Direct. More than a dozen different kinds, each made with only all-natural ingredients and containing no preservatives, are showcased online.

Select from six scrumptious cheesecakes, including amaretto, black forest and cappuccino. Sink your teeth into carrot cake, German chocolate cake or chocolate truffle cake. A chocoholic's fantasy, this last is silky dark chocolate subtly enhanced with the finest Dutch chocolate liqueur.

For something lighter, select lemon cake or banana walnut torte. Either makes a perfect accompaniment to fresh fruit, iced coffee or tea.

Cakes that are classic.
Finally, for the ultimate in indulgence, try one of Desserts Direct's classic cakes. Choose from the English Charlotte, a light Genoise cake delicately rolled with raspberry puree and filled with raspberry and vanilla Bavarian cream; the Zuccotta Supreme, a taste treat packed with fruits, nuts, liqueur and Vienese cream and topped with a hard chocolate frosting; or the Mandarin Orange, a moist, dense white cake with a cheesecake base, laced with whipped cream and mandarin pieces and drizzled with butter cream frosting.

Desserts Direct offers special two-day delivery on all of their cakes and will gladly include your personalized message, if the cake is a gift or in celebration of a special occasion. Prices listed online include all shipping and handling charges, and all cakes come with Desserts Direct's money-back guarantee.

Enter the Birthday Cake of the Month Contest.
Enter Desserts Direct's Birthday Cake of the Month Contest by simply registering your name and birthday online. Every month, Desserts Direct will select at random one lucky shopper whose birthday is that month and award him or her a free cake of his or her choice.

For your just desserts, GO DS.

Dessert Direct's grand opening, free connect weekend: July 2 and 3.

Learn the fundamentals of keeping cool. From the Air-Conditioning and Refrigeration Institute.

What are some basic rules to follow for keeping cool at minimum cost? Is central air-conditioning more energy-efficient than window units? How exactly does an air conditioner work? When do I know it's time to replace my system?

Have your questions answered.
These are just a few of the questions answered online at the Air-Conditioning and Refrigeration Institute. This new information-only service, brought to you by the trade association representing manufacturers of central air-conditioning and heat-pump systems, offers dozens of energy- and cost-saving tips for consumers.

Virtually everything you've wanted to know about air-conditioning is spelled out in easy-to-understand terms. When is the best time to buy an air conditioner? How often should you change filters? What is it like to install central air-conditioning in an older house?

With summer in full swing, one trip online to this new Mall store could help you keep your cool, and save you cold cash. For the ABCs of air-conditioning, GO ARI.

The Air-Conditioning and Refrigeration Institute's grand opening, free connect day: July 17.

BUICK

Buick Motors' online Free-For-All.

We dare you. Come to Buick Motors' Free-For-All. Visit during the month of July and you'll enjoy:

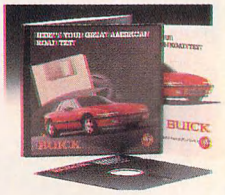
- Four weekends of free connect time
- Free Buick Dimension software
- Free Buick high-tech brochures
- Free information on The Buick Open and other motorcar events

Visit Buick's electronic showroom.
Subscribers are invited to visit Buick's electronic showroom where they can easily and conveniently view the full line of Buick cars, from spirited sports cars to roomy station wagons to personal luxury cars.

Featured cars include the Regal, an elegant aerodynamic coupe that offers room for six, and the Reatta, a sporty front-wheel drive two-seater with many extras.

To assist in selecting the Buick that's best for you, Buick has several special services. Online, you can consult the Buick size/type selector. You also can request free product brochures and free Buick Dimension Software.

Test drive a Buick on your personal computer.
Buick Dimension software puts you behind the wheel of a Buick ... in the comfort of your home. With amazing graphics capabilities, this program provides you with complete specifications, options packages, standard equipment and pricing ... everything you need to know in order to make an informed buying decision.



The software, which adapts to any IBM, Apple or Mac, is yours for the asking.

Buick's Motorsports Center.
Buick's Mall showroom also contains a Motorsports Center. From here, order Buick merchandise, such as authentic racing jackets, T-shirts and baseball caps. Consult the activities calendar for future events, including the upcoming Buick Open, July 27–31, at the Warwick Hills Country Club in Grand Blanc, Michigan. You can check recent racing results online.

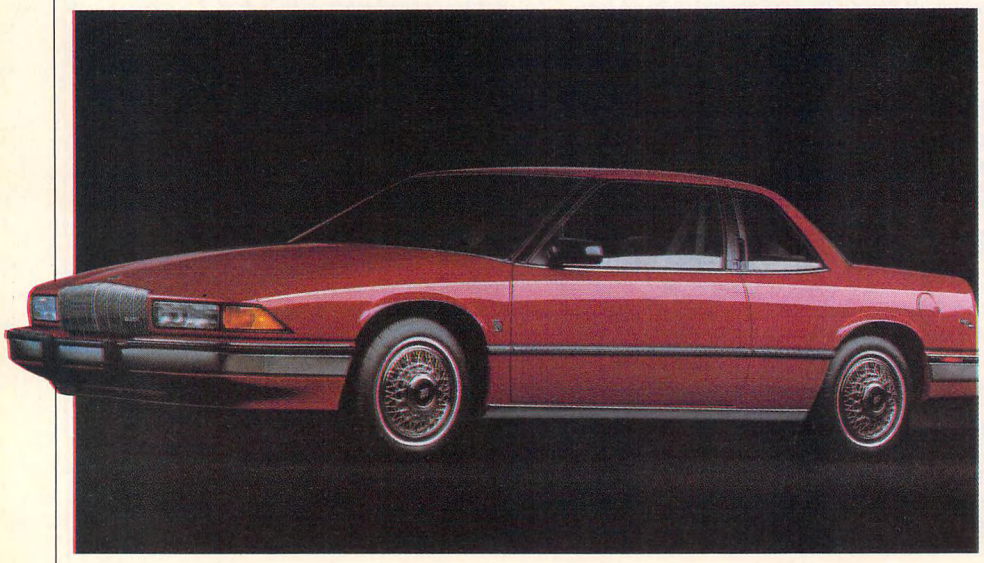
Four weekends for free.
So come in and explore the Buick online showroom, free, every weekend in July.

There will be no connect charges at Buick the weekends of July 2, 9, 23 and, in honor of The Buick Open, the weekend of July 30.

Which Buick is right for you?
Buick wants to assist in selecting the Buick that best fits your needs and budget. The electronic showroom is designed to make the initial process of shopping for a car as simple, easy and painless as possible.

Once you've decided on a particular make and model, consult Buick's electronic Dealer Locator online. Search by city, state or zip code for the dealer nearest you. Visit them, already armed with all the information you need on models, makes, options and pricing.

Then drive home in your new Buick. GO BU



Two for the road.

This summer you **can** take it with you, via one of the new laptops. Shopping for one has never been easier. Simply visit the Mall's Computing Department, where you can compare features, prices and extras, all from the convenience of your home.

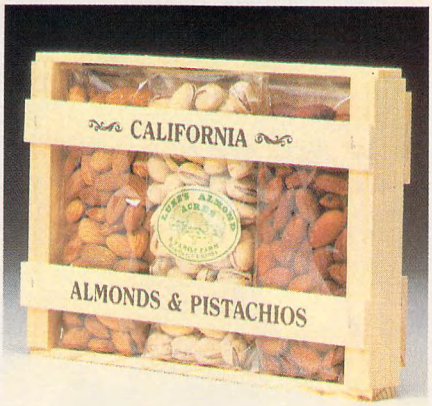
- At MaryMac, for example, a selection of Tandy portables, starting as low as $429.95, is showcased online. Featured models include the Tandy 200 portable 24K, the Tandy 102 portable 24K with parallel and RS 2332 interface, and the Tandy 1400 portable. GO MM
- Visit R+R Direct to view the new DataVue™, SPARK™ and SNAP 1+1™ laptops. The SPARK is a full-featured IBM compatible, with lots of extras, that's remarkably affordable. GO RD

The SNAP 1+1, weighing only 9 pounds, is incredible. An 8088 microprocessor and 640K RAM give you the power to do everything a standard personal computer can do—with full IBM compatibility. You can also purchase extras, such as a 300/1200 modem, a 5 1/4" external drive, batteries and a carrying case, online. GO RD

- To take a look at the Toshiba T100 and T3100, and the Zenith Z-181 and Z-183, visit Nitro Micro (GO NT) and Computer Discount Warehouse (GO CD). Computer Discount Warehouse also carries the NEC Multispeed EL, a state-of-the-art machine featuring a full-size keyboard, a backlit screen, built-in software and other extras.
- Finally, for pocket-size portability, try the PSION Organizer at Paradise Technology. This amazing little machine, quite literally pocket-size, is only $229.95! GO PT.

Insure your portable online.
Once you've selected a new laptop, be sure to make a stop at Safeware: The Computer Insurance Co. For as little as $39 a year, you can insure your new investment.

During the month of July, Safeware even has a free gift for all subscribers who visit—a *Do not disturb: computer wizard at work* door sign. Simply stop in and request yours! GO SAF



Coffee Emporium lifts the lid on the Fog Bank.

Have you noticed new smells wafting from Coffee Emporium's Mall store lately? Now the secret's out. Coffee Emporium has lifted the lid on its Fog Bank, an innovative new concept of a store within a store.

The Fog Bank brings you the best California taste sensations available ... gold rush sourdough bread mix ... Napa Valley mustard and catsup ... almond and pistachio gift boxes ... Napa Valley wine jellies ... all make great gifts, for family, friends or yourself.

Discover the new taste treats Coffee Emporium has in store. GO COF

Win a Texas-style picnic from Simon David.

Make any purchase at Simon David during July or August and you'll automatically be registered to win a gourmet Texas-style picnic basket.

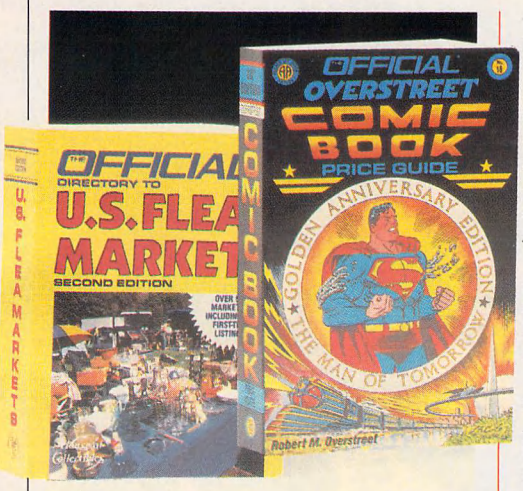
One grand prize winner will be drawn and will enjoy a real Texas cookout round-up with this Texas-sized basket. It starts out with all of the ingredients for nachos, including Simon David's own nacho thins, Texas popcorn (whole jalapenos), Shotgun Willie's Queso and Chili and D.L. Jardine's Cactus Salsa.

Next, head for the grill with four, 10-oz., mouth-watering, trimmed ribeyes, smothered in Simon David's mesquite-smoked barbecue sauce. Other fixin's filling the basket include D.L. Jardine's Texas "Champagne" (hot sauce), Texapeno ketchup and mesquite-smoked mustard. And for dessert there's a pound of Lammes Texas pecan pralines.

To quench your thirst? Why, a bucket of Mariano's Margarita Mix, of course!

Steaks at a 10% discount.
For your chance to win, simply shop Simon David. Pick up some steaks (at 10% off) for a backyard barbecue ... stock up on gourmet sauces and spices ... send a Simon David gift basket as a thank-you to a summertime hostess ... order jelly bellys for the kids or truffles for yourself. Any purchase qualifies you for a chance to win the Texas cookout grand prize.

Also, request a Simon David charge application online. Now's the time to open an account at "the best little gourmet shop in Texas." GO SIM



Collectibles, free connect time at Ballantine Books.

Has Ballantine got a book for you! Browse the online selection of new and backlist titles especially for collectors.

For baby boomers, there's *The Official® Price Guide to Collectibles of the '50s and '60s, First Edition.* Find out just how much those coonskin caps, Beatles wristwatches, poodle skirts and Barbie dolls cluttering your closet are worth.

To celebrate the 50th anniversary of the Man of Steel, there's *The Official® Overstreet Comic Book Price Guide.* This 18th edition features an exclusive interview with Superman's creators and includes updated prices on more than 80,000 comic books.

Other new, updated editions include *The Official® 1989 Price Guide To Antiques and Collectibles, Ninth Edition; The Official® Price Guide To Toys, Fifth Edition;* and new 1989 editions of *The Official® Blackbook Price Guides to United States Coins, Paper Money and Postage Stamps.*

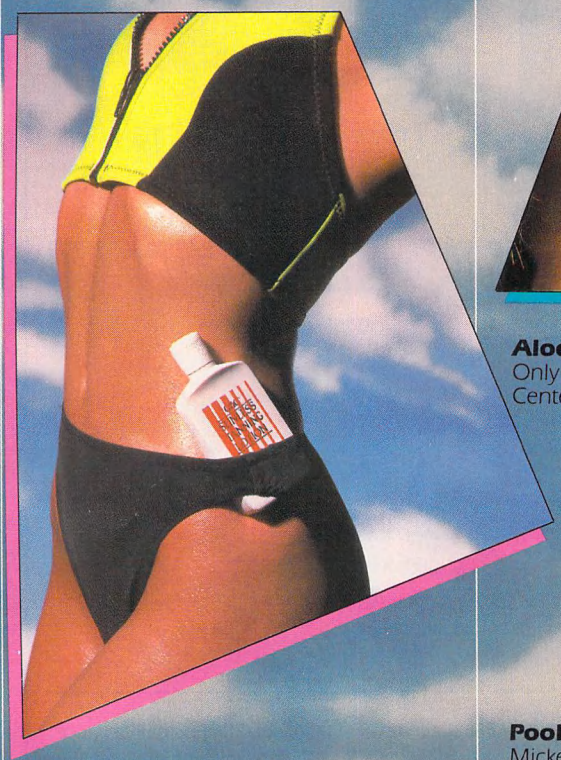
Especially recommended is *The Official® Directory to US Flea Markets, Second Edition.* Back by popular demand, this new edition has been completely updated and expanded to cover city-wide and country-fair markets— state-by-state and town-by-town. Flea market enthusiasts will find more than 500 of the best flea markets from Maine to California listed here.

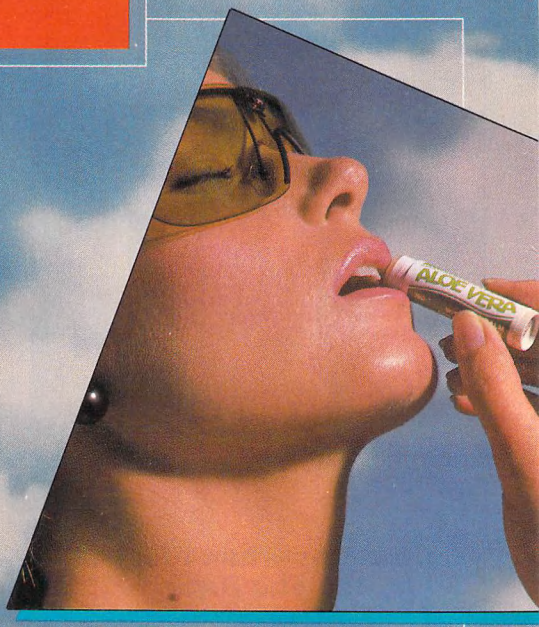
Two days of free Mall shopping.
Ballantine invites all subscribers to a free online shopping spree the weekend of Saturday, July 9. Discover Ballantine's collectible collection ... pick up a bestseller or two for the beach ... escape to other worlds with a Del Rey sci-fi classic ... you'll find page-turners guaranteed to please. GO BAL

Prerequisites for the beach blanket brigade:

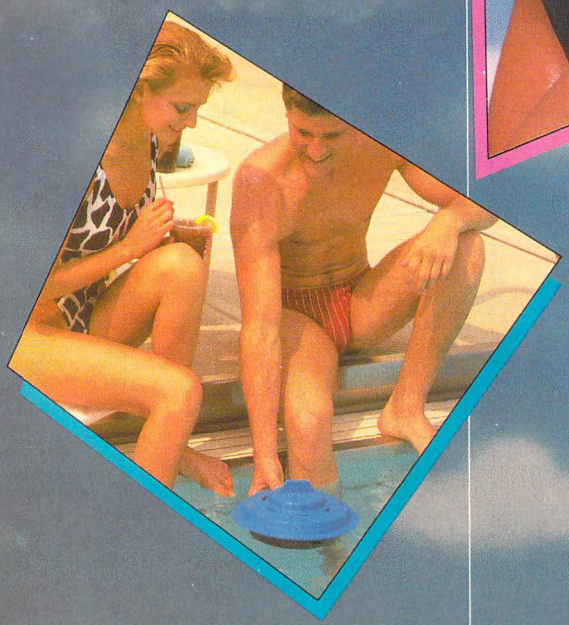
It's a Mall Beach Party!

Sunless tanning lotion.
From General Nutrition Center. GO GN





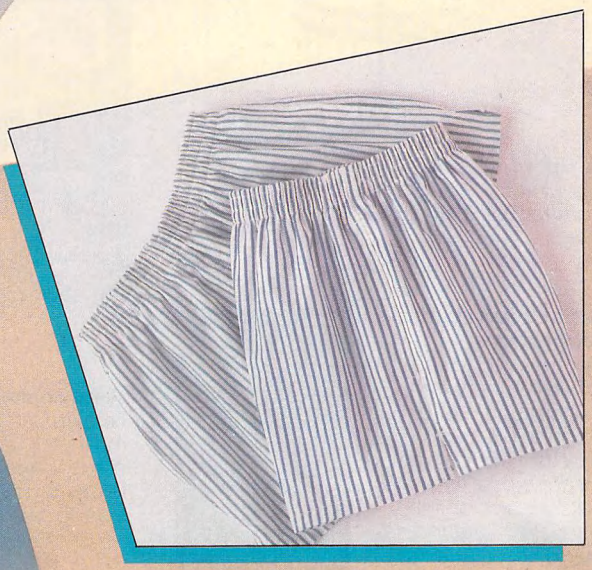
Aloe lip balm.
Only 49 cents! From General Nutrition Center. GO GN



Remington Pool Alarm.
Floats on the surface of your in-ground or above-ground pool. Alarm is activated by waves created when children or pets fall into the water. From Rin Robyn Pool 'N Patio. GO RR

Poolside Perrier?
Mickey and Minnie inflatables for the pool. This classic pair come floating your way bearing two glasses with drinks to beat the heat. From Walter Knoll Florist. GO WK

Signature sunglasses.
Ray-Ban® ... Serengeti® ... Vermillion ... solar shields that block 100% of hazardous ultraviolet radiation ... plus the all new Carrera® Windsurfing Goggle and Carrera All Weather Sports glasses. From Elite Eyewear. GO EE



Get into the swim.
Bold striped boxer style cotton swim trunks. Available in red, blue or green stripes on white. From Brooks Brothers. GO BR

Tahitian Textra™ Lounge.
Comfortably supports more than 250 pounds! From Rin Robyn Pool 'N Patio. GO RR

Pina colada coffee.
Great iced or steaming hot. From Coffee Emporium. GO COF

DISCOVERIES IN PRINT

Order free print catalogs from these Mall merchants and browse them at your leisure at the beach, by the pool, or in your backyard. Then shop the smart way, from the air-conditioned comfort of your home. All catalogs listed here are free and all can be requested online.

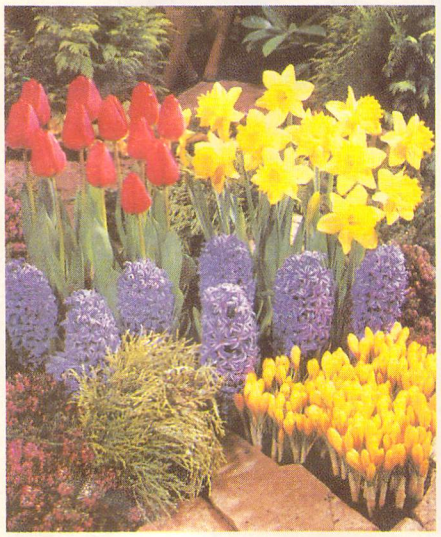
Brooks Brothers Summer 1988.
Featuring selections for men, women and boys. GO BR

Pepperidge Farm Gift Catalog.
Featuring cookie collections, candies, snacks, soups and great gift items. GO PF

Grill Lover's Grill Book.
Thirty-two pages of great accessories! From Char-Broil Grill Outlet. GO CO

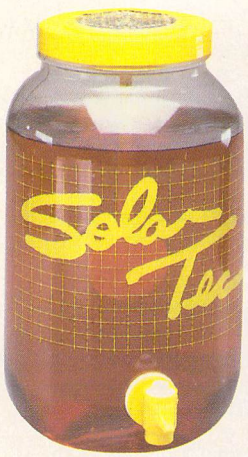
Olympic Training Center Gift Catalog.
Get set for the summer games at Seoul! Featuring official Olympic merchandise, including: T-shirts, warm-ups, duffle bags, tumbler glasses, key chains, even an official trainee bib for the future Olympian! GO OL

GOURMET FOODS & FLOWERS



Bulbs you won't need to change. Get ready for the fall planting season today. Daffodils, tulips, hyacinths, irises, crocuses and more, all in a rainbow of colors, are featured.

Especially recommended is Walter Knoll's Specialty Bulb Selection, including six quality bulbs guaranteed to bloom. Plus, if your combined bulb order is over $50, you'll receive a free bulb planter! From Walter Knoll Florist. GO WK



Tea brewed by the sun. Solar tea-maker from Coffee Emporium. GO COF

HOBBIES, TOYS & PETS

A roll of the dice. Dice to go! Glow-in-the-dark dice ... the Zocchihedron, a 100-sided die that must be seen to be believed ... a Koplow quality dice set that's imported from Germany and includes a free Tag velour dice bag. From TSR Games Shoppe. GO TSR

THE MEN'S SHOP

A tip of the hat. Genuine Panama Optima fedora-style hat from Brooks Brothers. GO BR

HEALTH & BEAUTY

What's what in fragrances. Confused as to the difference between parfum and eau de cologne? Unsure whether to give him cologne or after-shave? Take a quick online tutorial in fragrances at Harris Scent-Sations. GO HR

Second sight. Lost a contact lens? Now you can replace it quickly and economically online. Simply send your prescription via EasyPlex to Elite Eyewear, including brand name and parameters, and you'll receive a free EasyPlex quote on a replacement lens. Complete details on this new service can be found online at Elite Eyewear. GO EE

MERCHANDISE & ELECTRONICS

Audio/video specials. Explore online specials from Crutchfield's extensive audio/video catalog. GO CFD

BUSINESS & FINANCE

Keeping in touch with AT&T. An online guide to AT&T's long-distance services at home, at the office and on the road. Services featured include AT&T 800 service, AT&T WATS service, AT&T's Dial-It 900 service, International Communication Service and The AT&T Calling Card. Free brochures on all services. GO ATT

Museum note cards. Winslow Homer watercolors, Van Gogh prints, Georgia O'Keeffe paintings and more. From The Metropolitan Museum of Art. GO MMA

AUTO

A new lease in life. Foreign cars ... corporate jets ... farm machinery ... hospital equipment ... you name it and ABC Compu-Lease probably leases it. To discover the advantages of leasing, visit them online. GO DU

BOOKS & PERIODICALS

Computer books, guides and software. *On-line Programming Language Reference Guide* and *The CYMA Bookkeeper: Simplified Bookkeeping Software for Business and Home.* From McGraw-Hill Book Co. GO MH

FUN AND GAMES

Expose the Mystery Merchant. Back by popular demand: it's another Mystery Merchant Riddle! Be one of the first 10 subscribers to correctly solve the puzzle and you'll be rewarded with a $12.50 usage credit.

Answers will be accepted online through "Fun & Games," found in the electronic edition of *Go Mall* (GO GMO), beginning 12:01 a.m., July 1.

Good luck!

I'm six of one, three of two and two of three.
Some of me is here today and gone tomorrow.
I can be sweet, or I can be sour.
Juggle what I've given you and tell me who I am.

And don't forget ...

- AT&T's monthly Chain Link Contest. GO ATT
- Tele-Charge's monthly Theatre Buff Brain Buster Quiz. GO TC

MALL DIRECTORY

ARTS, MUSIC, VIDEO

RCA RCA Music Service
EMC Express Music ✶
MV Magic Castle Video
MAO Music Alley Online
MMA Metropolitan Museum of Art ✶
TC Tele-Charge—Theatre tickets
WB Waldenbooks

AUTO

AQ Autoquot-R
DU ABC Compu-Lease
AV AutoVision
BU Buick Magazine ■
FMC Ford Motor Co. ■

BOOKS/PERIODICALS

BAL Ballantine Books
DJ Dow Jones & Company
MH The McGraw-Hill Book Co. ■ ✶
MER Mercury House
BK Small Computer Book Club
TL Time-Life Books
WB Waldenbooks
AN Antic Online

BUSINESS & FINANCE

INC Business Incorporating Guide
HRB H&R Block
MU Max Ule Discount Brokerage
EF EF Hutton ■
NN NewsNet
DJ Dow Jones & Company
IS Investment Software ■
HRA Halvorson Research Associates †

CLUBS & MEMBERSHIPS

RCA RCA Music Service
SAC Shoppers Advantage †
MT Moment's Notice ■
BK Small Computer Book Club
TL Time-Life Books

COMPUTING

PRT Butler Graphics
CDA CDA Computer Sales ■ ✶
CD Computer Discount Warehouse
CE Computer Express ✶●
MNU Menu International
TL Time-Life Books
IS Investment Software ■
MM Marymac Industries
NT Nitro Micro ■
RD R+R Direct ■ ✶
DM Direct Micro † ■ ✶
SAF Safeware Computer Insurance ■
SDA Software Discounters of America
SP Some Things Special
AN Antic Online
PT Paradise Technology
ATT AT&T ■

GIFTS & COLLECTIBLES

IV Ivory Cache ✶
JE J.E. Smith Brassware
SP Some Things Special
DD Don's Dollhouse & Miniatures ● ✶
WK Walter Knoll Florist ●
COF Coffee Emporium ■
FFS Florida Fruit Shippers ■
PF Pepperidge Farm ■ ✶
SIM Simon David
CR Crabtree & Evelyn † ■ ✶
DS Desserts Direct †

GOURMET FOODS & FLOWERS

COF Coffee Emporium ■
FFS Florida Fruit Shippers ■
PF Pepperidge Farm ■ ✶
SIM Simon David
WK Walter Knoll Florist ●
MC Morrell and Company ■
DS Desserts Direct †

HEALTH & BEAUTY

GN General Nutrition Corporation ■ ✶
HR Harris' Scent-Sations
CR Crabtree & Evelyn † ■ ✶
EE Elite Eyewear ✶●

HOBBIES, TOYS & PETS

DD Don's Dollhouse & Miniatures ✶●
HC Hobby Center Toys
TSR TSR Games Shoppe ■ ✶
PW Petworks
HTH The Heath Co. ■
KC New York Kennel Club †

THE MENS SHOP

APC Apparel Concepts for Men ■
BR Brooks Brothers ■ ✶
IO Inside * Outside Lingerie ✶

THE WOMENS SHOP

BR Brooks Brothers ■ ✶
IO Inside * Outside Lingerie ✶
IV Ivory Cache ✶
HR Harris' Scent-Sations

MERCHANDISE & ELECTRONICS

ATT AT&T ■
ORD CompuServe Store
CFD Crutchfield ■ ✶
HS Hammacher Schlemmer ■ ✶
PS PanSon Electronics †
SAC Shoppers Advantage †
ARI Air-Conditioning and Refrigeration Institute †
AE Ankai Electronics † ■ ✶

OFFICE SUPPLIES & SERVICES

EX Executive Stamper
SC Stationery Center ● ✶
SAF Safeware Computer Insurance ■
PRT Butler Graphics
RD R+R Direct ■ ✶
DM Direct Micro † ■ ✶
TII TII Translation Service †

SPORTS & LEISURE

RR Rin Robyn Pool 'N Patio ■
OL Olympic Gift Store ■ † ✶
CO Char-Broil Grill Outlet †
HS Hammacher Schlemmer ■ ✶

TRAVEL & VACATIONS

AF Air France ■
AT Ameropa Travel ■
MT Moment's Notice ■
BH Bargain Holidays of Florida †
EV ENDLESS VACATION TRAVEL ✶†
OAG Official Airline Guide

■ Offers free print catalog.
✶ Denotes electronic order form for use with print catalog.
● Credits cost of print catalog toward purchase.
† Denotes new merchant.

HOW TO ORDER

Shopping The Mall.

Ordering from The Electronic Mall is easy. Each time you enter a Mall store, a personal order file, much like an electronic shopping cart, is opened for you. Browse a store's database, and when you see a product you would like to buy, type the letter "O" and the order will be placed in your file, similar to selecting an item from a store's shelf and placing it in your cart.

You can order directly from the product description page — there is no need to return to a store's top menu. You can order one item or a dozen. When you type "O," the system does not complete your order; it only registers your desire to make a purchase.

Checking out.

To complete your order, you must "check out." You can do this by typing CHECKOUT, the GO command of the next store you wish to visit or any command that takes you elsewhere on CompuServe. This tells the system you are ready to complete the order and presents two options.

1. Cancel your order by typing EXIT.
2. Complete your order by responding to a series of prompts for additional information.

When you have supplied the necessary information, you will receive an order summary. You now have the chance to change part or all of your order. For example, if you've ordered three books but decide you only want two of them, you can delete one book from your order. Or maybe you would like to have your order shipped to your office instead of your home. You can make that change, too.

Once you've made any changes, you again will have the chance to review your order. When you confirm the order as correct, you will receive an order confirmation number. *At this point, your order is complete.* It is sent electronically to the Mall merchant's CompuServe mailbox for processing. The order process is the same for every Mall merchant, but methods of payment and delivery may differ. If you have questions regarding your order, it is best to contact the merchant directly by using the customer service information provided within each store.

GOINGS ON—AT A GLANCE

JULY

					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

AUGUST

1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

July 1
- Open House at Shoppers Advantage. Free connect. GO SAC*
- New Theatre Buff Brain Buster Quiz at Tele-Charge. Win a prize! GO TC
- Enter Shoppers Advantage's Scavenger Hunt and Shopping Spree Sweepstakes. GO SAC
- New AT&T Link Contest. GO ATT
- Enter the new Mystery Merchant contest and win a connect credit. GO GMO

July 2
- Open House at Shoppers Advantage. Free connect. GO SAC*
- Free connect at PanSon Electronics. GO PS*
- Free connect at Desserts Direct. DO DS*
- Free connect at Buick Motors. GO BU*

July 3
- Free connect at Desserts Direct. GO DS*
- Free connect at PanSon Electronics. GO PS*
- Free connect at New York Kennel Club. GO KC*
- Free connect at Buick Motors. GO BU*

July 4
- Happy Birthday, America! (Enter Desserts Direct's Birthday Cake of the Month contest) GO DS
- Last chance to enter Shoppers Advantage's Grand Opening contests. GO SAC

July 9
- Free connect at Ballantine Books. GO BAL*
- Free connect at Buick Motors. GO BU*

July 10
- Free connect at Buick Motors. GO BU*
- Free connect at Ballantine Books. GO BAL*
- Free connect at TII Translation Service. GO TII*

July 14
- Bastille Day. Visit Air France! GO AF
- Visit the all-new Waldenbooks. GO WB

July 15
- All-new Mall auctions from 8 p.m.– midnight, EDT. Banter online with an auctioneer! GO BID
- Free connect Mallwide. GO MALL

July 16
- Free connect at Express Music. GO EMC*
- Winners announced for Shoppers Advantage's Grand Opening contests. GO SAC*
- All-new Mall auctions from 8 p.m.– midnight, EDT. GO BID

July 17
- The Air-Conditioning and Refrigeration Institute's grand opening free connect day. GO ARI*
- Free connect at Express Music. GO EMC*
- All-new Mall auctions from 8 p.m.– midnight, GO BID
- Direct Micro's grand opening, free connect day. GO DM*

July 22
- All-new Mall auctions from 8 p.m.– midnight, EDT. GO BID

July 23
- Free connect at Buick Motors. GO BU*
- Free connect at Express Music. GO EMC*
- All-new Mall auctions from 8 p.m.– midnight, EDT. GO BID

July 24
- Free connect at Crabtree & Evelyn. GO CR
- Free connect at Express Music. GO EMC*
- All-new Mall auctions from 8 p.m.– midnight, EDT. GO BID
- Free connect at Buick Motors. GO BU*

July 29
- All-new Mall auctions from 8 p.m.– midnight, EDT. GO BID

July 30
- All-new Mall auctions from 8 p.m.– midnight, EDT. GO BID
- Free connect at Buick Motors. GO BU*

July 31
- All-new Mall auctions from 8 p.m.– midnight, EDT. GO BID
- Free connect at Buick Motors. GO BU*

August 1
- New Theatre Buff Brain Buster Quiz at Tele-Charge. GO TC
- New AT&T Link contest. GO ATT
- Shoppers Advantage's Bermuda Beach Party begins. GO SAC
- Enter the new Mystery Merchant contest and win a connect credit. GO GMO
- Play the Mall's Summer Shopping Games!

August 6
- Free connect at PanSon. GO PS*

August 7
- Free connect at PanSon. GO PS*

August 13
- Free connect at CDA Computer Sales (an all-new database featuring Macintosh products). GO CDA*

August 14
- PanSon's grand-opening, free connect day. GO PS*
- Free connect at CDA Computer Sales (an all-new database featuring Macintosh products). GO CDA*

August 31
- Watch for the Third Annual YOUR NUMBER'S UP! coming in September.

* Please remember that for Mall promotions that include free connect time, all applicable communications surcharges remain in effect. Free connect is always from midnight to midnight.

THE WOMEN'S SHOP

Summer silks.
Bikini panties ... camisoles ... nightshirts. From Inside*Outside Lingerie. GO IO

COMPUTING

Flash!
Computer Express has tripled the size of its store. More software than ever, including a just-introduced line of Nintendo™ products. GO CE

Disk, disk, disk.
Bulk quantities of 3.5 inch, 5.25 inch and 8 inch disks at super savings. All disks have been tested and certified 100% error-free by the manufacturer, and come with a lifetime warranty. From Direct Micro. GO DM

HOW TO OPEN A MALL STORE

Do you have a product or a service of interest to CompuServe subscribers? Consider opening a Mall store. Contact the sales office for details.
Call 614/457-8600. Or write:

The Electronic Mall®
5000 Arlington Centre Blvd.
Columbus, OH 43220
614/457-8600

Ask Customer Service

Q: How can I obtain securities quotations in a format suitable for importing into a Lotus 1-2-3 or other spreadsheet program with an equivalent format?

A: This feature is supported in several of CompuServe's securities pricing services. In two such services, Quick Quote and Prices, when you are prompted to enter the ticker symbols or CUSIP numbers, at the Issue prompt, type /OUTPUT=filename. PRN. By adding the .PRN extension to the filename, you instruct the service to store the information in a suitable 1-2-3 format.

After typing this command, you will again be prompted with "Issue: " and should type your ticker symbols. The quotations will be placed into the file you specified and stored in your financial file area. Type GO FILTRN to download the file.

Q: Can I obtain 20-minute delayed quotations on stock options? If so, how do I obtain the ticker symbols for these issues?

A: CompuServe's Quick Quote (GO QQUOTE) database contains approximately 20,000 option quotes. Option tickers used in Quick Quote begin with a period followed by the issue's underlying ticker symbol, and then a two character suffix, for example, .IBMJK would be an option for IBM.

If the issue's underlying ticker contains more than three characters, the third character is changed to the letter Q and the remaining letters drop. An example, using Apple Computer's ticker AAPL, is .AAQJK. And, if the underlying ticker is less than three characters in length, as many as three spaces are added and the option suffix is appended. An example for AT&T, is ticker T, with .T JK.

Q: Is there a financial file area available for my ticker files and output files?

A: Yes, the MicroQuote II database has a file area for your ticker input files and output files. When you create an output file in one of the securities pricing programs, for example, /OUTPUT =QUOTES.PRN, that file is stored in your Financial File Area. The amount of file storage and retention time in your Financial File Area is equivalent to that found in your Personal File Area. Type GO MQUOTE to access this area, and then type HELP for a list of features.

Q: Where can I obtain instructions or help for the financial services file available on CompuServe?

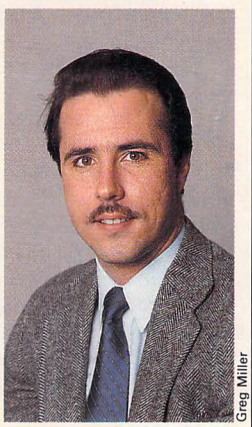
A: There are a number of methods to obtain detailed instructions for most of the financial services. You can select the item titled "Instructions/Fees" from the Money Matters/Markets menu and five of its submenus. Most of the financial programs are grouped into four menus accessible by typing GO QUOTES, GO SECURITIES, GO COMMODITIES, GO ANALYSIS and GO SYMBOLS. In addition to receiving help from the "Instructions/Fees" option, you can also type /HELP within most financial programs to obtain assistance.

Q: What types of securities are available on a 20-minute delay basis from the Quick Quote database?

A: You can obtain 20-minute delayed quotations on stocks, indexes and options on stocks, and seven of the more popular foreign exchange rates from the Quick Quote database. Type GO QQUOTE to access this financial program.

Tip of the Month

John Muehlheim, a graduate of Ohio State University and a veteran of the US Air Force, is a CompuServe Customer Service representative from noon to 9 p.m. Monday through Friday. "This schedule enables me to use my interpersonal communication skills with a cross-section of subscribers. My job is an opportunity to present a growing company directly to its customers," he says.



Greg Miller

Muehlheim

Muehlheim enjoys all of the news and sports services offered online. "With CompuServe, a world of information is at your fingertips. If you take advantage of this and use the forums often, you can realize your personal and professional goals in a unique way."

Gift of Time

Online Today offers subscribers the chance to win 10 hours of standard service connect time (a $60 value) by writing a 200-word essay on how they use CompuServe's Information Service.

The essay should be typed double-spaced and sent to *Online Today*, CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or via an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

The winning essay will be published in *Online Today*.

Purchasing Power Online

CompuServe has helped me in many ways.

While pondering a software purchase, I logged onto the Kaypro Forum and requested opinions of the program I was considering. Within 12 hours I had two responses—one from the software's creator—which helped me make a decision.

While writing an article on Borland's Superkey keyboard enhancer, I found useful information in a thread in the Borland Forum. Some of the forum libraries were helpful, too.

Travelshopper lets me know what I can expect when I make travel plans. A few minutes of browsing fares makes me a more-informed consumer.

Joseph I. Mortenzen
Midland, Mich.

Read CompuServe News

Online Today Daily Edition covers the online community. Whether it's a forum conference announcement, a special promotion or a new product introduction, you can read all about it in the *Daily Edition*. To access news about the CompuServe community, type GO OLT-50 at any CompuServe Information Service prompt.

*COMPUSERVE THIS WEEK	OLT-50
About Update	OLT-60
Community News	OLT-80
Conference Schedules	OLT-120
Letters to Editor	OLT-30
Online Today Guide	OLT-351
Previous Weeks' What's News	OLT-270
Uploads Updates	OLT-3700
What's New	OLT-70

CONSUMERS REPORT:

Linking up for Better Buys

by Daniel Janal

Before buying big-ticket consumer items, smart shoppers often read reviews in trade magazines, ask friends for recommendations and shop around for the best prices.

But these steps won't cover all the bases. For example, even the largest magazines can't review every model of stereo equipment or camera lens. And you may be the first on your block to buy a camcorder. Then who do you ask for advice?

Try CompuServe's consumer services.

CompuServe subscribers have access to a veritable encyclopedia of consumer reports and up-to-the-minute product reviews. Forums, staffed by experts and populated by avid hobbyists, are great places to find advice on the newest gadgets. Forum libraries carry reviews of competing products, and message boards offer recommendations.

Ask the Experts

"CompuServe's forums link consumers with qualified people who can assist them," says Jim Rulfs, CompuServe product marketing manager. "They can access information on specific products before they invest their money."

Subscriber Chuck Lawson says CompuServe's forums are the first places he looks for such information. He says the advantage of the forum environment over the print medium is due to a combination of factors: First, information, for the most part, is ex-

changed free from advertiser bias. It is timely, free of publication deadlines. This is particularly important in areas where changes occur daily, such as the stock market. And it is the ultimate advantage in a forum such as the Aquaria and Tropical Fish Forum where the lives of pets may be at stake.

Finally, information is exchanged in an interactive environment. Ill-considered or ill-informed decisons are subject to quick rebuttal. Even though much noise and fury can attend this process, the result tends to be enlightenment.

The online experts are not shy about telling what products they like and dislike. "People have strong opinions when it comes to their hobbies," says Dawn Gordon, a reviewer for several audio/visual magazines and forum administrator of the Consumer Electronics Forum. "It makes for lively discussions. People want to make sure they buy the right products."

The hobby forums (GO HOBBY) are gold mines of information.

For example, model builders have constructed a healthy network of contacts and information by using the ModelNet Forum (GO MODELNET).

"We have services important to model consumers," says Forum Administrator Doug Pratt. "The main one is the database of US hobby shops, which is updated monthly. It is easy to search, and it lists more than 2,000 specialty stores for airplane and railroad modelers. We also have club databases listing more than 3,000 model clubs, where members can look to find activity in their areas."

The Official Contest Calendar, which lists sanctioned model airplane contests, is uploaded every month by *Model Aviation* magazine before it is published in the print issue. *Model Shopper* magazine is also active on ModelNet.

The forum also features special consumer services for members. "When a person joins a model airplane flying club, he or she needs flying insurance," Pratt says. "This is provided by the Academy of Model Aeronautics; when you join the AMA you get the model coverage. Through ModelNet, a modeler can submit an electronic application to AMA and get confirmation of insurance coverage overnight. Club officials use ModelNet's message board to verify club rosters and to do official work. All this is a substantial part of the effort to keep models flying safely all over the country."

Constructing network of contacts: *Pratt*

Steven Thomas

There's nothing fishy about the information hobbyists receive in the Aquaria and Tropical Fish Forum (GO FISHNET). The forum is a spawning ground of facts and opinions about products, diseases and news. Online conferences with noted aquarium experts provide members with current, authoritative information.

Get Unbiased Answers

"Our members are among the best informed consumers in the hobby," says Bill Rogers, vendor support liaison. "We provide a vendor support area where they can submit questions directly to major manufacturers in our industry."

Members agree. Says Gary Smith, an ATF Forum member from Ann Arbor, Mich., "Through message threads and informal conferences, I have come to rely on the folks in the forum as my primary source of information and advice on hardware, chemicals and fish. Information here is unbiased—there are no advertisers to mollify and no overstocked items to move.

"I also use the forum libraries for information on the compatibility and maintenance of fish I'm interested in, information on scientifically recognized dosages of medications (sometimes not presented accurately by the manufacturer), suitability of medications for particular diseases, and abstracts and reviews of books I might wish to purchase," Smith says. The forum's Library 2, "Aquarium Products," is replete with more than 150 product information files and product reviews. Library 8 contains reviews of more than 200 books on related topics.

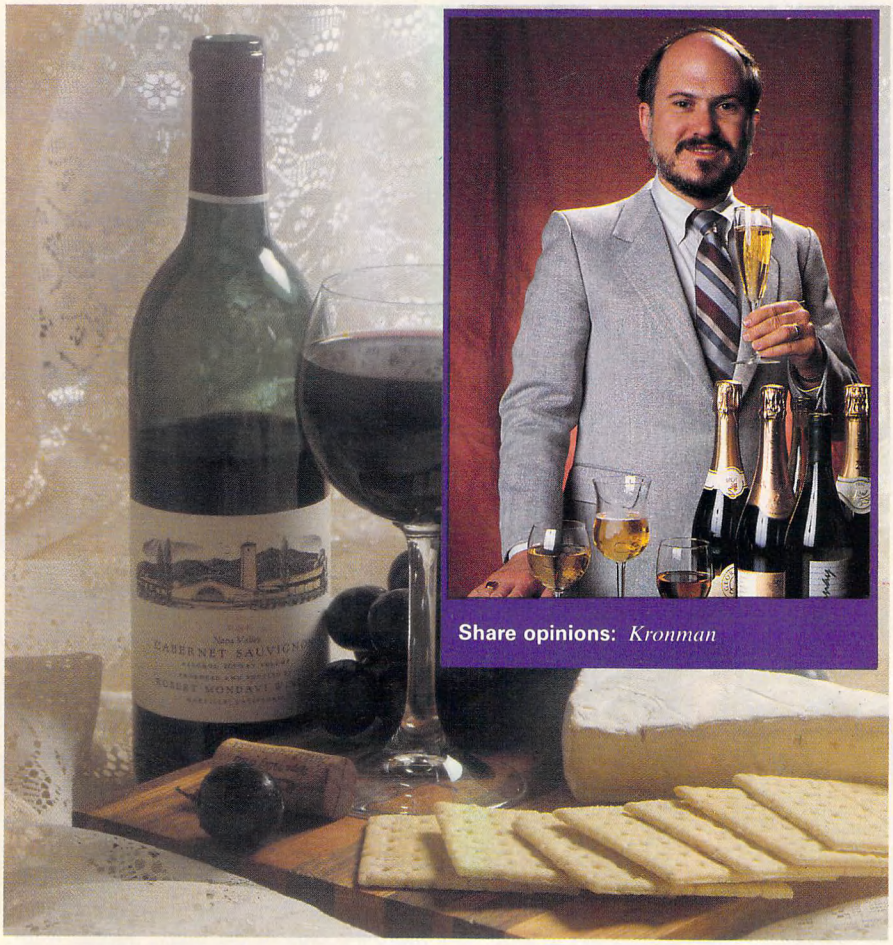
Says Chuck Lawson, "Not only am I better informed on which products to buy and where and when to buy them, but more important, I am better prepared to make the best possible use of the products I purchase."

The forum provides contact with other people who have a similar level of interest in the same area. "That kind of contact can be rare in a given locale, but ATF and CompuServe overcome that limitation," says Lawson.

Members depend on the forum for fast, reliable information. Rather than call a fish doctor at 2 a.m. they post a message on the bulletin board and get

Advice abounds online: *Smith*

Larime Photographic



Share opinions: *Kronman*

an answer from someone on the West Coast.

Before taking the big plunge into their pocketbooks, diving enthusiasts can read reviews of new outfitting and gear in Library 6 of the Scuba Forum (GO DIVING). Boats for sale are listed in the Ship's Store, Library 15. "We have a library devoted to learning to dive. It educates the consumer on how to shop for training, where to look for lessons and about diving in general," says Rick Drew, the forum administrator. "There's even a file of terms, many humorous, designed to dispel false impressions about diving."

Consumerism often translates into saving human lives in the Scuba Forum. "I have seen everything that can go wrong with equipment. Most malfunctions are caused by a lack of care," Drew says. "I have uploaded numerous files on equipment care to this area, covering everything from flooded regulators (and how to save them) to patching a BC bladder. Look for the files with CARE in the keyword area. Read them all—they could save a dive, or even a vacation."

After working up an appetite, shop CompuServe's food and wine forums for new recipes and equipment before going to the market. Cooks can find new recipes for ethnic fair, entertaining and dieting in Cooks Online (GO COOKS). Reviews of cookbooks and recipes are available in Library 15, "Tools and Books." The files include a review of the cookbook *Menus á Trois*, a dBase III file of *Chocolatier* magazine recipes from 1984 to 1988 and a review of *Sunset Mexican Cookbook*.

Need to find the perfect wine to go with your new recipe? The Bacchus Wine Forum (GO WINEFORUM) features book reviews in Library 3 and members' tasting notes in Library 2.

"This is the area where members can share—and air—opinions about wines and discuss tasting experiences," says Jim Kronman, forum administrator. "This data area is devoted to users' tasting notes. If you have always wanted to be a wine writer, here is your big break!"

The Book Review Digest (GO BOOKREVIEW), a database produced by the H. W. Wilson Co., provides references to more than 26,000 fiction and non-fiction English-language books. Reviews are drawn from more than 80 American, Canadian and British periodicals covering general and social sciences, humanities and general reference.

A full citation is available for each book, listing the author, complete title, publisher, date of publication and reviews included. Once you've found a reference to the subject of interest, you can look at an abstract, which provides

Search Strategies for Smart Consumers

It is said that advice is cheap. But on CompuServe, there are hundreds of experts willing to dispense advice for free.

Here is a strategy to follow to get the most from these willing advisors.

First, check forum libraries for current reviews of products and message threads covering a general topic of interest. For instance, if you are in the market for a new television set, read a thread about new features such as "surround sound" or universal remote controllers.

Next, let the experts know you are in the market. Find the appropriate forum and post a message to ALL. Be sure to list the product you want information about in the Subject field so people will quickly know what your message is about.

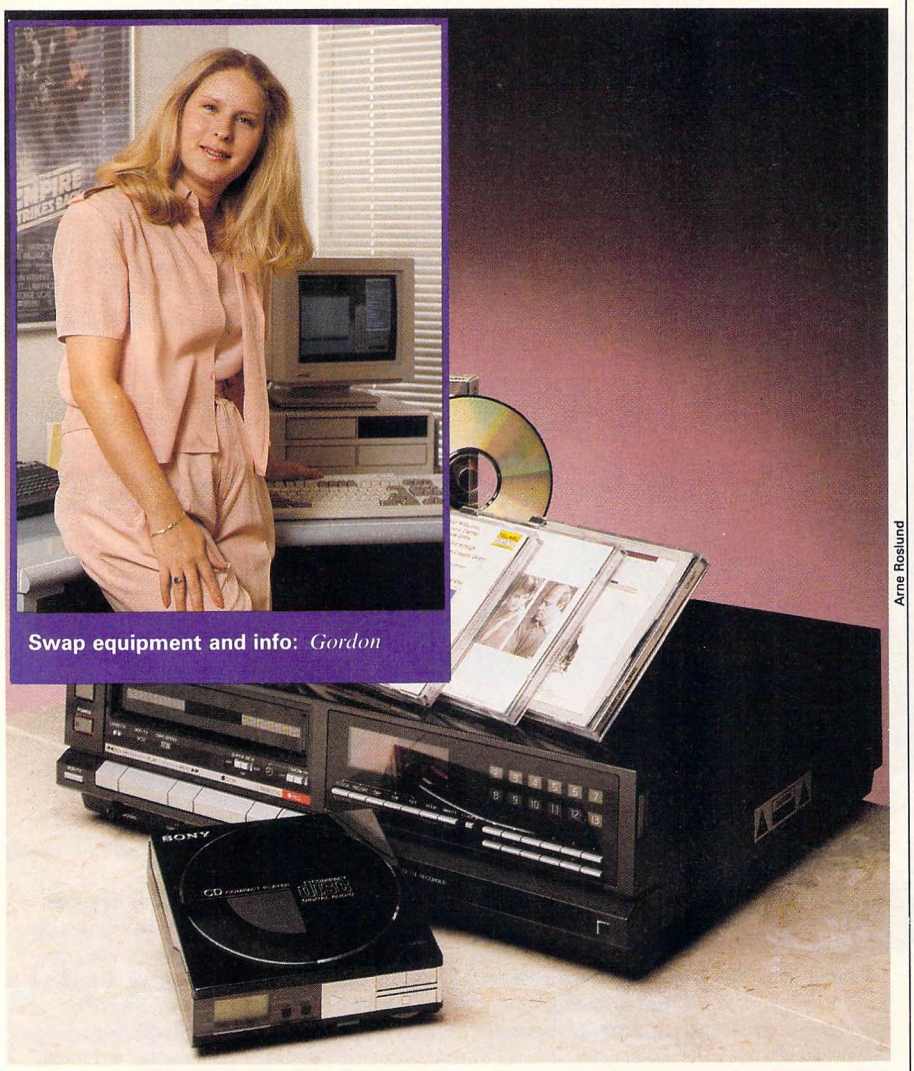
Ask the online experts if anyone has had a problem with that model. Then inquire if anyone has connections in the business, or knows of a reputable mail-order house where the item can be purchased for less than retail. Of course, check the prices in The Electronic Mall® (GO MALL).

In two or three days, you should get a few responses.

After you've bought and used the product, write a short review and upload it to a forum (such as the Consumer Electronics Forum) for others to examine. You'll be returning the favor.

Remember, the opinions expressed online are those of individuals and not necessarily those of the forum administrators or CompuServe.

—DJ



Swap equipment and info: *Gordon*

Arne Roslund

a summary of reviewers' opinions and a description of the book's contents.

If watching television or listening to the stereo is to your liking, look to the Consumer Electronics Forum (GO CEFORUM) to provide authoritative product reviews of even the most sophisticated devices on the market. Forum libraries contain product reviews on video and audio hardware and software; film reviews; television, cable and radio analyses; and information about satellite systems and telephones.

Read Reliable Reviews

"The Consumer Electronics Forum is a consumer-based product that helps subscribers in a number of ways," says Dawn Gordon, forum administrator. "We answer questions regarding VCRs, stereo systems, phone products, satellite gear and just about any kind of electronic gadget you can think of. We also include reviews of various products in our data libraries, as well as the latest press releases of upcoming equipment.

"Members not only swap equipment but they also swap important information, such as which camcorder has the best performance, which mail-order companies to stay away from, and which new video title has the highest quality," she says.

The CE Forum boasts professional reviewers and consumer experts. Gordon writes for *Video* magazine and *Stereo Review*. Bill Rood, assistant forum administrator, is an engineer whose reviews have appeared in *Video Facts*. Glenn Hart writes for numerous magazines, including *Digital Audio*.

Because of their editorial contacts, they test products long before the rest of us even hear of them. That makes the CE Forum the first place to check product information. Press releases about new products are posted in the forum libraries and online discussions debate the merits—or demerits—of products.

"If products are no good, we'll say so," Gordon says. "Because so many members get products before the rest of the public, we'll be the first ones to know." When Rood spotted a problem with a VCR from a major manufacturer, "we told people not to buy it." Products passing their rigorous tests are rewarded at year's end: "We put up a shopping list of things to buy for Christmas," she says.

After hearing "horror stories" from members who have purchased "lemons," Gordon may use her influence with company executives. "I've interceded on behalf of members and told them how to get products repaired for free," she says.

Consumers who want to give company representatives an earful can join online conferences that feature guests from major companies—including Sony and Pioneer.

"We get the latest information on what they are working on," Gordon says. The hottest topics now include "surround sound" decoders, universal remote controls, satellite systems and telephone products.

Photography is one of the most popular hobbies in the country. While the purchase of a quality camera has always been a serious investment, recent price increases make it even more so. Not surprisingly, people want to do their homework before laying out hard-earned cash on their next photo equipment purchase.

"We're often asked to recommend cameras and other products for the professional, the novice and all who fall in between," says Photography Forum Administrator Mike Wilmer. "The message board is always buzzing with talk about this lens or that film. The discussions are filled with comparisons and technical information not available in popular publications."

The Photography Forum (GO PHOTOFORUM) features several benefits magazines can't offer. "A magazine has only so much space to review products, but in a dynamic medium such as a forum message board, that isn't a problem," he says. Many of the most interesting and informative threads are maintained in the data libraries for future reference. "Warning a member *not* to buy something is often the best service we provide," Wilmer says. "I know that we've saved many members from potentially disappointing purchases."

The forum is proud of its record of

service to members. "This forum provides a great deal of consumer advice; in fact, I would say that's one of its major functions," says Ctein, a contributing editor of *Darkroom Photography* magazine. "Most advice is provided via the message board, with more tips exchanged in the informal conferences held three or four times a week."

The forum administrators can offer top technical assistance. For example, Bob Clemens is a photographer with Kodak and Bill Pierce is a Time-Life photojournalist. The forum features "online official representatives" from many companies, including Kodak, Nikon, Beseler and Vivitar.

"We also get some assistance from the many serious amateurs who comprise the bulk of the forum membership. It is rare that a question on a consumer matter won't garner several knowledgeable replies," says Ctein.

CompuServe features many forums on computers and software. Some are independent organizations, others are support forums sponsored by companies. While the company-sponsored forums are great places to find literature before you buy a program and for free help after you've bought it, the independent forums are natural reserves of unbiased opinions from average people who use the products and can point out merits and pitfalls before you buy the merchandise. (See accompanying story for forum names and navigation commands.)

Find Other Support Sources

Information USA (GO IUS-1332) provides tips on consumer issues, such as credit and managing money. Government periodicals on consumer affairs are described online in the Government Publications area (GO GPO) and can be ordered online.

The Investors' Forum (GO INVFORUM) and Financial Forums (GO FINFORUM) feature research and round-table discussions on investing techniques.

If a car is on your shopping list, the New Car Showroom (GO NEWCAR) features a questionnaire to help you find a car matching your driving requirements and your budget.

Product information is available from Ford and Buick. You can even learn how much the car should cost (GO AUTOQUOTE). If you need to lease a car, ABC Compu-Lease can provide information.

After you've found the gadget of your dreams, you must determine how much money you can spare to make a purchase. CompuServe can help with that, too. The Personal Finance area (GO FINTOL) contains programs that calculate your net worth and balance your checkbook.

Daniel Janal is president of Legal Computing Systems, a training and consulting firm in Fort Lee, N.J. His CompuServe User ID number is 76004,1046.

Find Hardware Help, Software Suggestions

The common thread that unites CompuServe subscribers is that they use computers and software. And anyone who uses a computer has questions. Free help is available from experts on which computer best suits your needs and how to use the computer you buy more effectively. More than 30 software forums and a dozen hardware forums are available on CompuServe. Nearly a dozen computer magazines make their editors available online for questions.

Some forums are staffed by company representatives who answer questions. Others are maintained by independent organizations that provide support services.

More forums are being added all the time, so check the latest online updates by typing GO SOFTWARE, GO HARDWARE and GO MAGAZINES.

Software Forums

Adobe Forum (GO ADOBE)
Aldus Forum (GO ALDUS)
Ashton-Tate Forum (GO ASHFORUM)
Autodesk Forum (GO ADESK)
Borland International (GO BORLAND)
CD-ROM Forum (GO CDROM)
Computer Consultants Forum (GO CONSULT)
CP/M Forum (GO CPMSIG)
Crosstalk Forum (GO XTALK)
Digital Research Forum (GO DRFORUM)
Forth Forum/Creative Solutions (GO FORTH)
Javelin Forum (GO JAVELIN)
LDOS/TRSDOS 6 Forum (GO LDOS)
Living Videotext Forum (GO LVTFORUM)
LOGO Forum (GO LOGOFORUM)
MCS MIDI Forum (GO MIDI)
MicroPro Forum (GO MICROPRO)
Microsoft Connection (GO MSCON)
Microware Online Support (GO MICROWARE)
Monogram Software Forum (GO MONOGRAM)
Novell NetWire (GO NOVELL)
OS-9 Operating System Forum (GO OS9)
Pascal Forum (GO MUSUS)
Programmers' Forum (GO PROSIG)
Software Publishing Forum (GO SPCFORUM)
WordPerfect Support Group Forum (GO WPSG)
World of Lotus (GO LOTUS)

Hardware Forums

Apple Users Group (GO MAUG)
Atari Forums (GO SIGATARI)
CD-ROM Forum (GO CDROM)
Commodore Users Network (GO CBMNET)
Computer Club Forum (GO CLUB)
DEC Users Network (GO DECUNET)
Epson Forum (GO EPSON)
Heath User Group (GO HEATHUSERS)
Hewlett-Packard PC Forum (GO HP)
IBM Users Network (GO IBMNET)
Kaypro Users Group (GO KAYPRO)
Tandy Users Network (GO TANDYNET)
Texas Instruments Forum (GO TIFORUM)

Magazines

AI Expert magazine (GO AIE)
Antic Online magazine (GO ANTIC)
Apples OnLine (GO AOL)
Commodore Newsletter (GO CBM)
Computer Language magazine (GO CLM)
Digital Research Inc. (GO DRI)
Dr. Dobb's Journal (GO DDJ)
Tandy Corporation Newsletter (GO TRS)

Panning for Gold

Vacationers Discover a Wealth of Fun in Nevada City

by Jonathan Ganz

For those looking to spend vacation time discovering American history, Nevada City, Calif., may be an ideal destination. With a population of about 2,500 settled in the midst of evergreen valleys and old mine shafts, the town holds a prominent place in the world of the gold miner. Nearby, the Yuba river is still mined, and by most estimates, more gold remains than was ever recovered in the California Gold Rush. To this day, visitors can see modern dredge-miners working five or six hours a day, waist deep, in freezing water.

A Little History

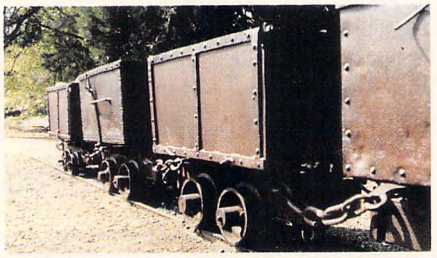
True to the legend of the California Gold Rush, Nevada City was born in 1849 when miners started working the placer claims along Deer Creek, which runs through the town center. The name Nevada, Spanish for snow-covered, most likely was chosen after the harsh winter of 1849.

Like San Francisco and Rome, Nevada City is built on seven hills (more or less). The street layout, resembling the spokes of a wagon wheel, originated from the mule trails made by miners returning home from mining at Deer Creek.

In the heyday of mining, it was common for miners to pull a pound of gold a day from Deer Creek. Nevada City was once the third largest city in California, drawing actors from around the world to play to Nevada City crowds. Huge sums were spent on Victorian era homes by the more successful miners and wealthy lumber barons. Some of these houses, along with many well preserved buildings, allow a visitor to glimpse at what life was like in the Gold Rush days. The American Victorian Museum is the only museum in the United States dedicated exclusively to the Victorian era (1840 to 1900).

How to Get There

Nevada City is accessible from Interstate 80, which runs between Sacramento and the Lake Tahoe/Reno area. From San Francisco or Sacramento, take Highway 49 (named after the gold miners who started it all) and head north about 30 miles. If you go south by mistake, you'll end up at Angel's Camp, another famous and worthwhile town to visit.



Rolling in gold: *Ore cars*

In either case, be sure to bring your camera, because the route (especially to the north) is breathtaking. The tall pine trees are surrounded by bright red soil. The air smells of burning wood, still a common method of home heating in the area.

The highway is narrow in spots, and it's worth taking your time because of the scenery. It takes about three hours to get from San Francisco to Auburn, at the junction of Interstate 80 and Highway 49, and another 40 minutes to wind your way to the Broad Street exit for Nevada City. To get maps of the area ($1.50 each), consult TravelVision on CompuServe (GO TRV).

Where to Stay

You should make hotel or motel reservations in advance, as there are not a lot of choices in the area and they fill up fast, especially at the end of the week. The ABC Worldwide Hotel Guide (GO ABC) lists two hotels in Nevada City and two in the neighboring town of Grass Valley. Of those in Nevada City, the National Hotel is by far the most interesting. It is the oldest hotel in California that has been in continuous operation. It opened in 1856 and is an official California Historical Landmark. The suites are furnished with antiques from the Gold Rush days, and a swimming pool is available in the summer.

Weather

If you visit Nevada City between June and September, expect warm to hot temperatures, up to 90 degrees during the day and 60 degrees in the evening. If you plan sightseeing during the day, bring a hat, suntan lotion and sunglasses. Remember, you'll sunburn more easily at the higher elevations in the area (varying from 300 to 9,100 feet). A sweater is desirable for the evenings.

If you plan to hike or camp in the foothills, check with the local forest service for fire safety tips. They keep a close watch on the fire danger, which for the last few years has remained high.

Bring sturdy shoes because you'll want to explore the side streets, where you'll find amazing Victorian era homes that are still lived in (not by the original residents, but there may be a ghost or two lingering under the cool shade of a

Jonathan Ganz

Glimpse at Gold Rush days: *'49er homes on Deer Creek*

Restored residence: *Victorian house*

porch). You might imagine running into Madame Dumont, who dealt "blackjack" to the miners.

For an excellent description of life during the late 1850s, read *The Shirley Letters* published by Alfred A. Knopf. The book is a compilation of several letters written by Louise Amelia Knapp Smith Clappe, a.k.a. Dame Shirley, to her sister in the east. They are witty and amusing and vividly portray life during this hectic period of expansion.

Spring and fall are the most dramatic times of the year to experience this area. But be careful; it's not unusual to get showers and storms with little notice. The cold air from the nearby Sierra Nevada mountain range mixes violently with the warmer central California valley air, producing spectacular lightning storms (without rain) and short-but-powerful downpours at a moment's notice. The rainy season is November to April, but don't be afraid to go during the beginning or the end of this period.

Winter can be beautiful, and there are many winter sports activities available in the area, but bring lots of warm clothes. The normal temperature is 34 degrees, but it can get a lot colder, especially with wind chill. Donner Pass, less than an hour from downtown Nevada City, was where members of the infamous Donner Party resorted to cannibalism to stay alive when they were trapped by fierce winter storms. You can check the local weather before you go by using one of the several weather reports available on CompuServe (GO WEATHER).

What to Do

Depending on the season, there are literally hundreds of things to do. According to a recent brochure, there are 34 established campgrounds in the area. The cost varies from no charge to $15 per day, and most are open only during the summer. There are many more "primitive" camping areas, which are free. Several trails and parks are designated as easy access for the disabled. Horseback riding, golfing, tennis and skiing (downhill and cross-country) are some of the more popular activities in the area.

Gold panning tours are available on four rivers. A brochure from the Nevada City Council warns: "Public land along rivers subject to existing claims. Beware of buckshot if claim jumping." And they aren't kidding! If you tire of finding gold, you can try river rafting on the Truckee river or check the dozen or so museums. You can also explore the many shops in Nevada City. Some feature antiques from the Gold Rush era.

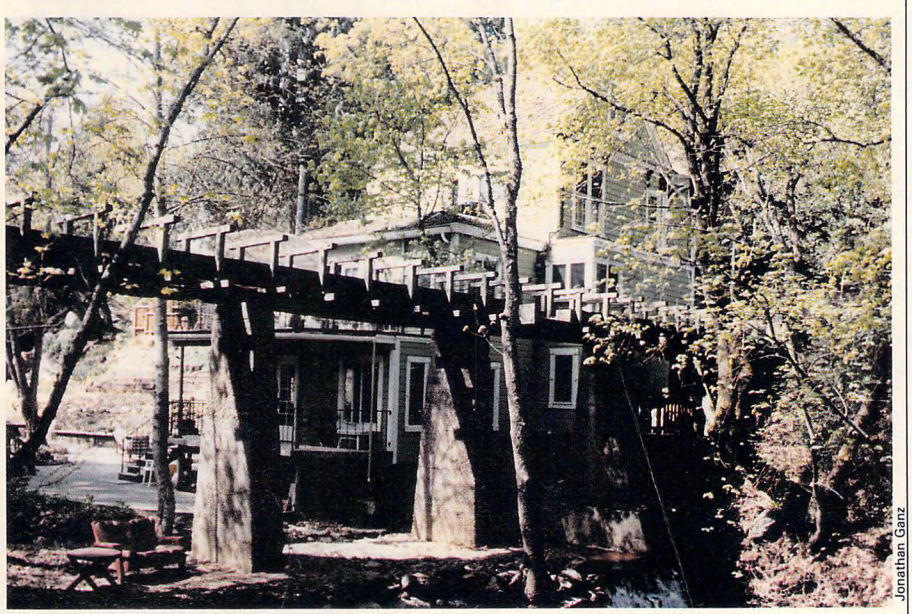
Early electricity generator: *Wagon wheel*

For a nice brunch on a warm weekend, go to Friar Tuck's, located just around the corner from the US Post Office. Be sure to request a table outside. If it's breakfast you're after, take a short ride into Grass Valley and go to Tofanelli's.

If you can make your visit during the months of July or September, you're in for a treat. Nevada City and Grass Valley share the Fourth of July celebration each year. Nevada City holds the parade on even-numbered years; Grass Valley holds it on odd-numbered years. The parade and festivities are true Americana. Not only do most businesses open their doors, but also the ones on Broad Street sell beer, hot dogs and pretzels in front of their shops. The parade includes all the notables in town, including the fire department, which will, if cheered, spray the crowd with their water hoses.

The parade in September, in observance of Constitution Day, is more traditional but just as much fun. The day is filled with patriotic observances and is the beginning of Nature's Fall Color Spectacular, so be sure to have plenty of film for your camera.

If you want more information about any of the activities, the Nevada City Chamber of Commerce will send you a yearly-events schedule as well as many free brochures. The address is 132 Main St., Nevada City, CA 95959, or call 916-265-2692.



Jonathan Ganz

Slumbering lumber channel: *Flume's End at Gold Flat creek*

Jonathan Ganz is a free-lance writer based in Portola Valley, Calif. His CompuServe User ID number is 74425,1054.

Courtesy of the Greater Los Angeles Visitors and Convention Bureau

The sky's the limit for Los Angeles visitors: *Sun-soaked city*

Enjoy the Big Orange

Sample a Slice of Los Angeles

by Jennifer Lowe

There's so much to see and do in Los Angeles, it's hard to know where to begin. Most visitors to this sun-soaked city of 3.2 million head for the big tourist spots—some of which should top any planning list. But the "Big Orange" has many more attractions, small and large, that can make for an entertaining trip any way you slice it.

Once you know where you'll be staying, it might be best to plan your days in advance, as the greater Los Angeles area spreads for miles. Magic Mountain, an amusement park, for instance, lies an hour north of downtown, while Disneyland is 45 minutes south of Los Angeles in Orange County.

If you plan to rent a car, request area maps. The American Automobile Association has plenty of maps and visitors' guides, and Los Angeles bookstores sell several guides to Los Angeles. An excellent one to buy is *Los Angeles Access* by Richard Saul Wurman.

But time's a wasting. Don't miss the chance to kick back and catch some rays.

The Biggies

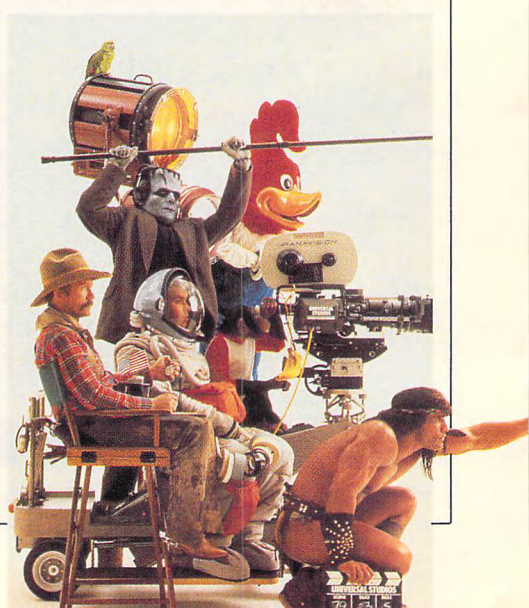
If you've never been to Disneyland, after your first day's visit you'll want to go back for more. The 76-acre amusement park in Anaheim features attractions grouped into theme lands: Main Street, Adventureland, New Orleans Square, Bear Country, Frontierland, Fantasyland and Tomorrowland. Plan to spend at least a full day. If you visit when the weather is hot, start in the late afternoon and stay into the evening when the $200 million park comes alive under the twinkle of tiny lights.

Knott's Berry Farm, in the Orange County community of Buena Park, is a 150-acre theme park that originated from a 1934 fried chicken restaurant. Enjoy chicken today in one of the park's restaurants, shop in a variety of stores or experience the rides and attractions in four themed lands.

Nearby is Movieland Wax Museum, where more than 230 lifelike wax figures of Hollywood stars are featured in 130 sets.

But if you want to see how Hollywood works, take the Universal Studios Tour in Universal City. More than 4 million people a year climb aboard trams for a two-hour tour of Hollywood backlots. You'll see how special effects are done and experience some in person.

On up through the San Fernando Valley and into Valencia is Six Flags Magic Mountain, an amusement park



of 100 rides and attractions amid 260 acres. If you want thrills, ride one of the park's five roller coasters, like the Revolution, which takes you on a 360-degree loop, or the Colossus, which reaches speeds of 65 mph.

Hollywood

The famed land of stars and movie studios today bustles with tourists, businessmen and women, and off-beat characters. You can see some of its sites on foot, and catch one of the many bus tours that take you past homes of the stars. (One of the newest tours, Grave Line Tours, transports tourists in an old hearse past homes of the famous dearly departed.)

The L.A. Film Permit Office at 6922 Hollywood Blvd. offers free daily lists of filming locations around town. Another outfit, Hollywood on Location (listed with L.A. information), sells extensive maps of daily filming spots you can drive to and possibly catch a glimpse of a star.

Outside Mann's Chinese Theater on Hollywood Boulevard you can match handprints and footprints with the stars who've left their marks in cement.

Take a short drive to the Hollywood Bowl, a natural amphitheater that hosts the summer season of the L.A. Philharmonic, and visit the museum. Also while driving, see if you can spot the Capitol Records Tower at 1750 Vine St., a Hollywood landmark. And speaking of landmarks, don't forget to look for the Hollywood sign, located on the lower slopes of Mt. Lee. Don't feel embarrassed asking someone to point it out; many Angelenos aren't sure where its best vantage points are.

You might want to catch a movie while you're in movieland. At the Cineplex Odeon Universal City Cinemas, you can pick from 18 theaters with 5,600 seats.

The Beaches

Beaches abound in southern California, some with more famous reputations than others. Even if you don't want to leave the car, the view of Malibu along Pacific Coast Highway is gorgeous. And the sand is even better.

South of Malibu is Santa Monica, a popular oceanside community with a great area of shops and an attractive pier. Ride the merry-go-round or walk to the pier's end and watch the fishermen. Farther south you'll come to Venice, a favorite spot of locals. Stroll the lengthy boardwalk and take in the sites—the most interesting of which are the people roller skating, playing musical instruments, blowing giant bubbles or performing magic. You can find inexpensive T-shirts and other gifts here.

Star attraction: *Hollywood Boulevard*

Two Orange County beaches worth seeing are Seal Beach and Laguna Beach. Seal Beach, just below Long Beach, is a quaint town with sidewalks worth strolling. Stop in at the ice cream store at the base of the pier. Laguna Beach to the south stretches over rolling hills and canyons that meet with the surf. Home to many artists, the community offers fine dining, beachside accommodations, and the best along-the-beach stroll in southern California.

Culture

Capture the essence of Los Angeles culture along Olvera Street in El Pueblo de Los Angeles State Historic Park near downtown. One of the oldest streets in the city, Olvera Street, features Mexican restaurants and merchants selling south-of-the-border items.

Just a few blocks away, Chinatown has its share of Chinese restaurants. A walking tour map is available from the Chinese Historical Society of Southern California.

Exposition Park, near the University of Southern California, features the California Museum of Science and Industry. The Mitsubishi Imax Theater shows films on a 50- by 70-foot screen.

Other museums worth seeing are the new Museum of Contemporary Art, the expanded Los Angeles County Museum of Art and the unusual Museum of Neon Art, the only one of its kind in the world.

The J. Paul Getty Museum in Malibu houses collections of Greek and Roman antiquities. Parking reservations must be made at least one week in advance. The Huntington Library in San Marino houses one of the world's finest collections of rare books and manuscripts. A botanical garden features 14,000 varieties of plants, shrubs and trees and a Japanese garden.

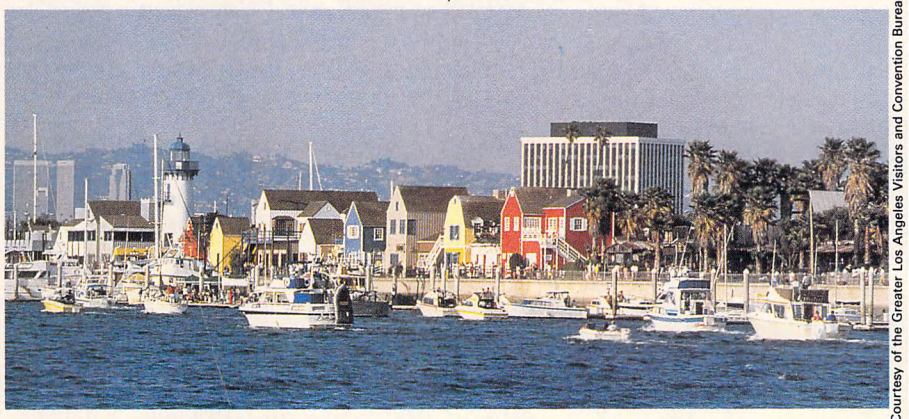
Shopping

Finally, what vacation would be complete without a tour of stores? Visit the Farmer's Market in the mid-Wilshire area to browse through a maze of market stalls and shops.

Visit trendy indoor malls, such as the Westside Pavilion or the Beverly Center in town or the Sherman Oaks Galleria or Glendale Galleria in the suburbs. South Coast Plaza in Orange County with its 270 stores is not to be missed.

Just remember that at malls—like everywhere else in Los Angeles—you'll have to hunt for a parking space.

Jennifer Lowe, a free-lance writer based in Los Angeles, is a feature writer for the Los Angeles Daily News.



Courtesy of the Greater Los Angeles Visitors and Convention Bureau

Colorful oceanside community: *Fisherman's Village*

Eaasy Sabre Puts the World at Your Fingertips

by Jim McCann

Online users have the world at their fingertips with American Airlines' Eaasy Sabre, a system that enables subscribers to make airline, hotel and car-rental reservations from the home or office computer.

Eaasy Sabre is available 24 hours a day, and there is no surcharge for the service. The user-friendly travel service leads you step by step through the reservation process. And once you are familiar with the system, a FAAST-TRACK option can be used to speed up the booking process.

Eaasy Sabre provides other information to aid in your travel plans. To help you plan what clothes to pack, a weather information service furnished by the National Weather Service provides current and extended weather information for more than 600 cities in the United States, Canada, the Caribbean and 50 other cities around the world.

How to Access and Enroll

Any CompuServe subscriber can use the service to gather information on flight, car and hotel availabilities and rates, but you must have a free Eaasy Sabre identification number (AAdvantage number) and personal password to make reservations. Users who already have an AAdvantage number still must go through the application process.

Each new Eaasy Sabre member automatically becomes a member of AAdvantage, American Airlines Travel Awards program. By adding your AAdvantage number, or the number of your preferred frequent-travel club, to an Eaasy Sabre flight reservation, you will ensure receipt of proper mileage credit to the awards program. Eaasy Sabre members receive a quarterly newsletter with helpful tips, a user's guide with a list of often-used keywords and a list of airport codes to aid in the booking process.

To access Eaasy Sabre, type GO SABRE at any prompt on the CompuServe Information Service. For subscribers using the service for the first time, it is helpful to select "Introduction" and "How to Use" from the introductory menu before proceeding. To be connected with the service, select the "Access Eaasy Sabre" option.

An easy, no-obligation application form can be completed online. After accessing the service and choosing Option 9 from the main menu, you are prompted for your name, address, phone and credit card numbers, and seating and meal preferences. (No charges are made against your credit card until you choose to use it to book a flight.) The system stores the information in your personal profile for future use of Eaasy Sabre, saving time and increasing convenience.

Shop for Flights and Fares

For new members, a step-by-step approach is available through Option 2, "Flights," on the main menu to start the scheduling process. Eaasy Sabre prompts you for your departure city or code—for example, Los Angeles or LAX. You are then prompted for the date, time and destination city—for example, New York or EWR, JFK or LGA, depending on which airport you wish to arrive at. You can book up to four seats at a time and can even reserve seats together for your trip.

For lists of codes for cities, airlines or flight classes, choose "System Quick Tips" from the main menu and then pick Option 3, "Travel Codes"—for example, a code of DL stands for Delta airlines, and the letters J,C,D represent business fares. It is helpful to write down the fare codes before viewing the flight screens.

A screen appears with flights matching the itinerary you choose. The airlines whose flights best meet your request will be displayed first. At the bottom of the screen, Eaasy Sabre prompts you to enter the line number of the flight you wish to book, or choose from several other options, including additional flights, fares that apply to your itinerary and airline dependability ratings.

Booking Your Flights

Once you decide what flight itinerary you want—one-way or round-trip—check the fare screen for the cost of the flight(s) and any restrictions that apply. You can book your flights in the class of service appropriate for your preferred fare. Or, if flight times are your priority, you can book convenient flights and let Eaasy Sabre automatically price your itinerary at the lowest possible fare.

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Jim McCann is an Online Today *editorial intern from The Ohio State University.*

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Answer the following three questions correctly, and you become eligible to win one free round-trip ticket for two to any American Airlines destination within the 48 contiguous United States (excluding Alaska and Hawaii). Use your travel know-how or GO SABRE to find the answers using EAASY SABRE.

1. How many alphanumeric characters are there in an EAASY SABRE ID? (Hint: The ID is the same as an American Airlines AAdvantage® number. Fill out a no-obligation application on-line to instantly enroll and obtain immediate booking privileges.)
   A. Five.
   B. Six.
   C. Seven.
2. How many alphanumeric characters are there in the itinerary number assigned upon completing a reservation? (Hint: Make an airline reservation on your favorite airline from the airport nearest you to a city you plan to visit. Upon completing your reservation, you will receive an itinerary number. Be sure to cancel the reservation if your plans change.)
   A. Five.
   B. Six.
   C. Seven.
3. What does a flight dependability factor of 8 indicate for a particular flight schedule?
   A. Eight (8) flights were on time last month.
   B. 80% to 90% of the flights were on time last month.
   C. 8% of the flights were on time last month.

NO PURCHASE NECESSARY. Type GO SABRE to fill out the contest application on-line, or send correct answers with your name, address and EAASY SABRE ID Number on a 3 x 5 card to July 1988 EAASY SABRE Contest, P.O. Box 639, Columbus, OH 43216. If you don't already have an EAASY SABRE ID, fill out the no-obligation application on-line.

CONTEST RULES

NO PURCHASE NECESSARY.
Entries must be received by July 31, 1988.
GO SABRE on-line in CompuServe and select contest menu to review rules and enter contest on-line, or answer the three contest questions on a 3 x 5 card with your name, address, city, state, zip code and EAASY SABRE ID (if available). Send entries to July 1988 EAASY SABRE Contest, P.O. Box 639, Columbus, OH 43216.
A winner will be selected in a random drawing on August 15, 1988, from all correct entries received. All decisions by the judges are final.
Odds of winning will be determined by the number of correct entries received.
Prize is a Coach round-trip ticket for two (2) persons to any American Airlines city in the contiguous 48 United States. Travel must originate from the American Airlines city within the 48 United States nearest prizewinner's city of residence providing direct service. Alaska and Hawaii are excluded. Trips may not be taken during inclusive blackout dates: July 1-6, September 1-6, November 18-29, 1988.
Prize consists of air transportation only. Ground transportation and overnight lodging en route or at destination will be at the sole expense of winner. If American, for any reason, discontinues service to the selected destination before the prizewinner's travel date, the prizewinner must select an alternate American Airlines destination. Stopovers are not permitted, and tickets are neither transferable nor refundable. Tickets must be requested within ninety (90) days after prizewinner has been notified of winning, and travel must be completed by June 30, 1989.
Minors must be accompanied on the flight by a parent or guardian.
A service charge of $25 per ticket will be assessed if a ticket is reissued due to a voluntary change of itinerary or a change in the name of a passenger. A check for $25 made out to American Airlines must accompany each request for ticket reissuance. Tickets requested within one week of the date of travel will be sent Federal Express C.O.D. only.
Neither CompuServe nor American Airlines is responsible for illegible, lost, delayed, misdirected or damaged entries.
This skills contest is open to residents of the United States.
IT IS VOID WHERE PROHIBITED OR RESTRICTED BY LAW.
All federal, state and local taxes apply, and said taxes are sole responsibility of winner. If any prizewinner is unwilling or unable to use tickets issued by American Airlines in connection with this contest, American Airlines or CompuServe will not be responsible for, nor obligated to pay, any expenses associated with the aforementioned provisions.
Employees and immediate family of American Airlines, CompuServe, their affiliates, advertising agencies or judging organization are not eligible. An affidavit of eligibility may be required.
Only one entry per person is allowed.
Winner will be notified by certified mail and announced by August 15, 1988, on-line. For name of winner, send self-addressed, stamped envelope after August 15, 1988. Allow 90 days after winner selection date for name of winner. Send to July 1988 EAASY SABRE Contest Winner, P.O. Box 639, Columbus, OH 43216.
Entrants hereby release CompuServe and American Airlines and their respective agents and affiliated companies from all liability with respect to all prizes.

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Proteus 286GTX Computer

Runs Beautifully at 6 and 12 MHz

Proteus Technology
377 Route 17
Airport 17 Center
Hasbrouck Heights, NJ 07604
201/288-8629 or 800/782-8387

Computer: Proteus 286GTX (dual-speed IBM PC-AT compatible).
Operating Systems: MS-DOS or PC-DOS, versions 2.x through 3.x.
Features: Intel 80286-12 processor, keyboard switchable 6 MHz (1 wait state) and 12 MHz (switchable 0 or 1 wait state) clock speeds, American Megatrends' 286-BIOS, 80287 coprocessor socket, 1,024K dynamic RAM (expandable to 16MB), 32K static RAM cache, one 1.2MB high-density diskette drive, one parallel port, two serial ports, 200-watt power supply, enhanced 101-key AT-compatible keyboard, two 8-bit expansion slots and six 16-bit expansion slots; DOS not included; 30-day, money-back guarantee; 15-month parts and labor warranty with on-site service.
Options: Wide selection of diskette drives, hard disks, monitors, video adapters, coprocessors, and other expansion cards and accessories; 84-key keyboard available on request.
Model Tested: 1,024K Proteus 286GTX equipped with 10 MHz Intel 80287-10 math coprocessor, two 1.2MB Teac diskette drives, 20MB full-height Priam ID-20AT InnerSpace hard disk with Western Digital WD1003 disk controller; dual 15MB Sysgen DuraPak drives, assorted video cards and monitors; running IBM PC-DOS 3.10.
Base Price: $1,650 for basic 1,024K 286GTX with two serial and one parallel I/O ports and one 1.2MB diskette drive.

Reviewed by Ernest E. Mau

Impressive IBM-compatible: *Proteus 286GTX personal computer*

Personal computers have been the mainstay of my business since 1978, and I've tested and evaluated numerous machines. To date, no IBM-compatible computer has impressed me more than the Proteus 286GTX.

The Proteus 286GTX uses an 80286-12 microprocessor and VLSI (Very Large Scale Integration) circuitry. It has AT-compatible 6 MHz and turbo-charged 12 MHz speeds, switchable on-the-fly from the keyboard. To further enhance high-speed performance, it can operate at 12 MHz with no wait states and using a 32K static RAM cache or with one wait state no cache, again keyboard switchable.

I compliment the 286GTX on its speed. With a Priam 20MB InnerSpace hard disk, Norton Utilities' System Information tests report a computing index (CI) of 5.8, a disk index (DI) of 3.8 and an overall performance index of 5.1 (relative to an IBM PC-XT) for the 286GTX running at 6 MHz. At 12 MHz with one wait state, the CI is 11.7, the DI is 3.8 and the PI is 9.0. At 12 MHz with no wait states, the CI is 13.7, the DI is 3.8 and the PI is 10.4.

By comparison, a 16 MHz Compaq Deskpro 386 has a CI of 17.6, a DI of 3.8 and a PI of 13.0. The Deskpro 386 has an edge over the fastest Proteus 286GTX speed, but not as much as one might expect.

Golden Bow Systems' Vbench compares machines against a standard PC-AT and includes relative speeds of multiplication, division, looping, moving and calling. At 6 MHz, the 286GTX registers 1.0 for all those, so it is the same speed as a standard PC-AT. At 12 MHz with one wait state, it reaches 2.0 to 2.05 times the speed of a PC-AT. At

12 MHz with no wait states, multiplication and division rise to 2.5 while looping, moving and calling rise to 2.6 times a PC-AT.

I wanted to test a real application, so I had AutoCAD 2.52 regenerate a hidden-line drawing by removing 4,375 lines from a 3-D wireframe drawing. The 286GTX needed 25 minutes at 6 MHz, but it finished in 12.5 minutes at 12 MHz with one wait state and in 11 minutes at 12 MHz with no wait states. My early, coprocessor-equipped, PC-compatible Compaq Deskpro takes 62 or 44 minutes at its two speeds. A 16 MHz Compaq Deskpro 386 does the same job in 9.25 minutes, giving it a small advantage, considering it costs far more than the Proteus machine.

Noticeable speed advantages carry through to all kinds of applications such as spreadsheets, databases, business graphics, desktop publishing and even spelling and grammatical proofing of word processor documents. The Proteus 286GTX outperforms all conventional IBM PC, PC-XT and PC-AT computers if applications aren't bound by slow keyboard operations. A 386-based computer usually will beat the Proteus 286GTX, but at a higher price that may not be cost-effective in some applications.

I was unable to find any PC-AT-compatible software that wouldn't run on the 286GTX, and I tried hundreds of programs. A handful had to be upgraded from PC versions to PC-AT versions, but that was expected. A few others I thought might be incompatible actually had problems within the software or weren't usable with a particular video card. Even packages that caused problems for an earlier (now discontinued) Proteus 286GT computer ran flawlessly on the 286GTX. Proteus Technology guarantees compatibility, and I have no reason to doubt them.

There is a caution concerning software protected by "keydisk" schemes. Neither this nor any other turbo-charged 286 computer I've used can recognize keydisks when running at top speed. The computer has to be slowed to start such programs but may be toggled to full speed after the keydisk has been read. This is the only software situation in which I have to slow the computer.

Hardware compatibility has been good but not perfect. I've run CGA, EGA, VGA and Hercules video adapters with the only troublesome one being an antique EGA card that cannot keep pace with new high-speed computers. A Sysgen DuraPak dual 15MB drive external mass storage system runs perfectly, as does a video acquisition and digitizing system.

I ran into an unexpected problem with an STB Systems' Grande Byte multi-megabyte extended memory card. It has slow memory chips, but I had it running in the older 286GT computer. However, the new 286GTX won't recognize that expanded memory if booted at 12 MHz. I can reset an internal computer switch to boot at 6 MHz and bring that memory online, but that risks data losses if I later toggle to 12 MHz. So any expanded memory cards should have chips capable of operating at the computer's highest speed.

A 101-key enhanced keyboard came with my system but was something of a problem. Aside from my basic dislike of that keyboard style, it wouldn't let me hot key into some memory-resident software, notably packages using a [SHIFT-PRTSC] command. Replacing that keyboard with an 84-key model cured the problem, and I've been told that 286GTX computers are being shipped with a different enhanced keyboard.

The 286GTX is solidly and attractively built. It has plenty of expansion slots, and none are blocked by the chassis or internal components. The system-board configuration switches are at the edge of the machine and are accessible without pulling cards.

The manual isn't fancy, being a bound book of typewritten and duplicated pages, but it gets a user started. Some readers might fault it for getting too technical, but I'd rather have too much information than not enough. I will criticize it for not having an index, however, because some information is hard to find.

But I can't complain about the computer itself. It has purred contentedly since I switched on the power several months ago. Considering the absence of software incompatibilities, the attractive price and an outstanding 15-month parts and labor warranty with on-site service, I can't beat this machine. In fact, it has become my primary computer, and I wouldn't ever want to be without it again. IBM can keep its PC-AT and PS/2 computers; I'll take the Proteus 286GTX before those anytime.

Ernest E. Mau, a full-time, free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

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Go Online for More Hardware Reviews

The following hardware reviews are available this month in *Online Today Daily Edition* (GO OLT-220).

FastTRAP Trackball-Based 3-D Pointing Device
Manufacturer: *MicroSpeed Inc.*
Computers: *IBM compatibles.*

Vega VGA Video Card
Manufacturer: *Video Seven Inc.*
Computers: *IBM compatibles.*

Okidata 180 Printer
Manufacturer: *Okidata Div. of Oki America Inc.*
Computers: *Commodore, IBM, Apple and compatibles.*

Memory Expansion For LaserJet Series II Printer
Manufacturer: *Pacific Data Products*
Computers: *LaserJet Series II-compatible computers.*

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Meyers, Pollock, Robbins, Inc.

170 Broadway
Suite 505
NY, NY 10038

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4Views

Adds a Database Manager to 1-2-3

Turner Hall Publishing
Division of Symantec
10201 Torre Ave.
Cupertino, CA 95014
408/253-9600 or 800/556-1234

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating System: PC-DOS or MS-DOS version 2.0 or higher.
Media: Supplied on 5.25-inch diskettes; 3.5-inch diskettes available by returning originals with coupon and $5 handling fee; requires two diskette drives or one diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: None.
Other Requirements: Requires Lotus 1-2-3 release 2.0 or 2.01; does not work with 1-2-3 release 1 or 1A or with Symphony.
Optional Items: None.
System used for test: 640K Compaq Deskpro 286 with one 1.2MB diskette drive, one 360K diskette drive, one 40MB hard disk, Vega VGA video adapter, NEC MultiSync II monitor and Hewlett-Packard LaserJet Plus printer; running MS-DOS 3.3 and 1-2-3 release 2.01.
List Price: $99.95

Reviewed by Harry Green

Diverse disk-oriented database management system: *4Views*

A friend and I once debated whether Lotus 1-2-3 was a database management system as well as a spreadsheet. He contended that 1-2-3's database functions made it all the DBMS one would ever need. I argued that 1-2-3 could behave like a DBMS in some ways but lacked essential features, such as an input screen interface, a report writer and a convenient record search procedure. Now, 4Views (version 1.00) is making me alter my views.

The 4Views package operates under Lotus' 1-2-3 Add-in Manager, which lets a program operate as if it was part of 1-2-3's design. Thus, 4Views is called with a function key and uses a menu and command structure exactly like 1-2-3's. The database is loaded as a spreadsheet.

When you call 4Views, it's displayed in the first of the program's four views, Table view, where the worksheet looks like a conventional spreadsheet, except that vertical lines separate the cells. You can scroll vertically and horizontally using conventional keys, and you can revise fields as if you were in a 1-2-3 spreadsheet.

A function key switches to Form view, which is a data-entry screen. The third view is "Xtab" (crosstab), which combines rows and develops column totals to produce a simple report. The fourth view is Report view.

A mark of a good DBMS is the ease with which you can filter and select. Filtering narrows the database to display only records you want. You set the filtering argument on 4View's command line. The database is narrowed to the desired records, after which it can be named and saved. Selecting is similar, except that you can set up a multiple argument with the select routine. Boolean operators (such as AND and OR) and all familiar arithmetic operators are used to find records that meet the search criteria.

Another attribute of a good DBMS is the ease with which you can produce reports, and this is where 4Views falls short. The first step in designing a report is preparing a template. By executing a series of commands, you can create the skeleton of a report template. The template is modified in 1-2-3 and contains control commands for the report's header, body and footer. Lines in the template begin with the function PRINT, which is followed by a modifier to tell it what to print. Several choices are provided (HEAD, BODY and FOOT, for example), which are self-explanatory. Other choices are less obvious, however, and it takes considerable study of the manual to figure out how the process works.

If you're a programmer, you'll have little difficulty formatting reports once you decipher the manual, which isn't clear in the reports chapter. If you're a non-programmer, be prepared to spend plenty of trial-and-error time.

The 4Views add-in has a facility for importing dBase files. The manual states that it imports data from dBase III compatible files. I didn't have one handy, so I tried a dBase II file, and it worked fine.

When a dBase file is selected, 4Views displays the field names across the spreadsheet and asks you to choose fields to import. One option is All, which selects the entire database. When you import a dBase file, 4Views creates the input form with a row for every field in the database. The resulting 4Views database appears exactly as it would have if created within 4Views and can also be treated as a spreadsheet.

4Views is limited by the amount of memory in the computer. By itself, it uses 114K of RAM, which limits the memory available for the database. When I tried to attach 4Views with HAL (Lotus' powerful command language) running, an out-of-memory condition occurred. Since the entire database must be resident in memory, like any Lotus spreadsheet, 4Views cannot handle large files. On the other hand, with the database in memory, you can select and sort faster than with most disk-oriented DBMS products.

If you need to get a database online quickly and if you're already familiar with 1-2-3, 4Views is a quick, convenient tool. Except for the report-writing process, the program is straightforward, and once you've taken the tutorial you should be ready to create your own database. If you need the power of dBase, 4Views is no substitute, but it's fine for the many lists that always seem to collect in every office.

Harry Green is president of Pacific Netcom Inc., a Portland, Ore., firm that consults with businesses on using office automation and telecommunications to improve productivity. His CompuServe User ID number is 70007,431.

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On Balance

Does Home Accounting and Money Management Tasks

Bröderbund Software
17 Paul Dr.
San Rafael, CA 94903-2101
415/492-3200

Computers: Apple IIe, IIc and IIgs.
Operating Systems: ProDOS 16.
Media: Supplied on single 5.25-inch and 3.5-inch diskettes.
Copy Protection: Program disks are protected; backup diskette available for $10 by mail.
Required Peripherals: None.
Other Requirements: Minimum 128K RAM.
Optional Items: Second diskette drive; printer; mouse.
System Used for Test: Apple IIgs with Apple Imagewriter printer on Appletalk network.
List Price: $59.95

Reviewed by Brian D. Monahan

There are many home accounting systems on the market, but I suspect that many sit unused. Unfortunately, many accounting programs that claim to make life simpler often make it more complex. On Balance is not such a program. It will give you control of your personal finances with minimum effort.

On Balance includes an excellent 111-page, spiral-bound users manual that begins with a brief but clear introduction to the principles of home finance. That introduction doesn't assume any knowledge of accounting or finance. Users without such a background will be given working definitions of assets, liabilities, net worth and net income in the first chapter. Those who don't need such an introduction are advised to move on to instructions for setting up and using the program.

The entire tutorial section of the manual takes about two hours to complete. The rear section includes an explanation of all On Balance operations. It also covers exporting On Balance data for use with Appleworks. In all, the manual is easy to work with. An excellent table of contents and a comprehensive index make the manual easy to use as a reference tool for beginners and experienced users.

The package also comes with a 10-page Quick Start/Quick Reference guide. Those who wish to skip the tutorial portion of the full manual can use this pamphlet to get the program started, prepare a data disk and begin entering information. The guide also contains a helpful two-page command reference card.

When starting the program for the first time, you'll choose "Start a New Database" from the opening menu. First, you will prepare a new data diskette that will hold up to 12 months of financial data. You type in the fiscal year in which you're working and the starting month for that year. First-time users also will run a printer setup that is explained in the manual. Then it is time to start entering data in the form of transactions.

For each transaction, you specify a date, the payee, the transaction number and up to two accounts. The first account entry identifies the account for which you are recording the transaction. It might be your checking account if you're making a payment. If that account doesn't exist, you will be prompted to enter a name for it. You also will designate the account as a liability, asset, income or expense, and you have the option of giving the account a group name.

Accounts later can be retrieved by group. You then can enter the optional second account. If you do enter that second account, you'll be able to track the flow of your money from one account to another, but if you enter only one account, the program functions much like a checkbook register. Finally, you enter the amount of the transaction.

Various options are available for editing existing transactions. You also may set up recurring transactions. The value of the program becomes most apparent, however, when you use it to reconcile accounts. Most of us are familiar with the process of reconciling a checkbook, but On Balance can reconcile any account for which you have entered transactions. The program also will produce four types of reports: net worth, net income, account reports and transaction reports. The reports can be of great value when preparing income tax returns and for other purposes.

Those who are conscientious about entering their financial data into the program will be rewarded with the ability to examine their finances in a variety of ways.

The program is easy and fun to use. I worked with it extensively and never got into a situation in which I did not know how to proceed.

In all, On Balance is an excellent program with many fine capabilities. The best thing I can say about it is that it's so easy to use that people may actually take the time to use it. We have come to expect fine software for the home and school markets from Bröderbund, and the On Balance program is no exception.

Brian D. Monahan is an associate professor of computer science at Iona College in New Rochelle, N.Y. He has published dozens of articles on computing in scholarly and popular journals.

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Diamond Integrated Software
Manufacturer: *Mosaic Marketing Inc.*
Computers: *IBM compatibles.*

PagePerfect
Integrated Desktop Publisher
Manufacturer: *IMSI*
Computers: *IBM compatibles.*

Desktop Publisher's Graphics
Manufacturer: *IMSI*
Computers: *IBM compatibles.*

Publisher's PicturePaks Clip Art
Manufacturer: *Marketing Graphics*
Computers: *IBM compatibles; Apple Macintosh.*

TM/1 Version 3.0
Spreadsheet and Table Manager
Manufacturer: *Sinper Corp.*
Computers: *IBM compatibles; Wang PC.*

"Fetch."
Data-Exchange Utility For 1-2-3
Manufacturer: *Manusoft Corp.*
Computers: *IBM compatibles.*

My Accountant
Financial Tracking Software
Manufacturer: *COSMI*
Computers: *IBM compatibles.*

Easy Laser LaserJet Utility
Manufacturer: *Acorn Plus Inc.*
Computers: *IBM compatibles.*

Connex
Data-Based Communications System
Manufacturer: *Productivity Performance Inc.*
Computers: *IBM compatibles.*

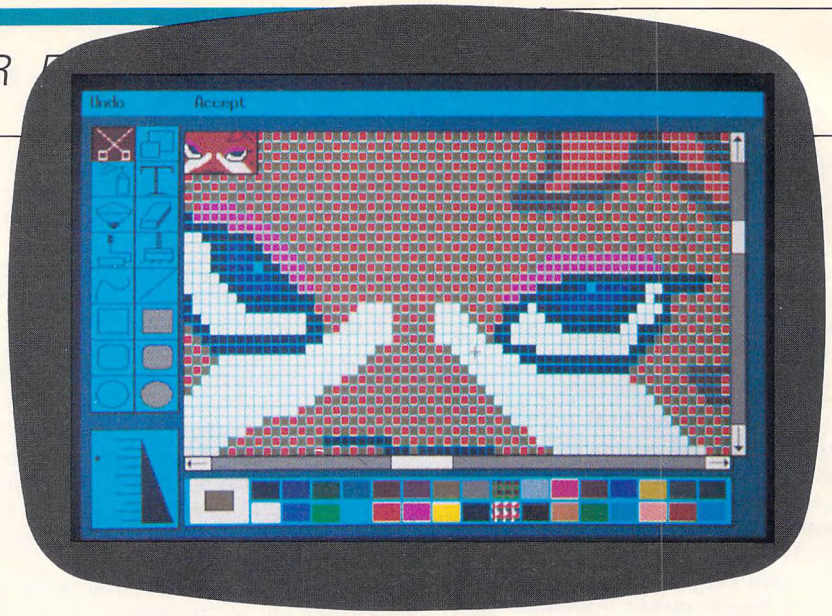
PC Paintbrush Plus

Handles Paint-Type Graphics

Z-Soft
450 Franklin Rd., #100
Marietta, GA 30067
404/428-0008

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Supplied on two 5.25-inch diskettes; available on 3.5-inch PS/2 diskette; requires two diskette drives or one diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: Mouse, joystick or digitizer.
Other Requirements: Minimum 320K RAM (384K required for high resolution monitor); Hercules or EGA graphics adapter.
Optional Items: Hard disk and mouse strongly recommended.
System used for test: 1,024K TeleVideo TeleCat-286 computer with two diskette drives, Control Data 40MB hard disk, Hercules Graphics Card Plus, monochrome monitor, Microsoft Mouse and LaserJet Series II printer; running PC-DOS 3.3.
List Price: $149

Reviewed by William J. Lynott



Painting pretty picture with graphics: *PC Paintbrush Plus*

With desktop publishing coming into its own as a legitimate print medium, the need for sophisticated graphics creation and editing continues to grow. PC Paintbrush Plus fills that need and does it well.

Like its predecessor, PC Paintbrush, PC Paintbrush Plus (version 1.51) is a freehand drawing program that also can be used for precise editing of existing computer graphics. This newest version has all the features that helped make the original PC Paintbrush an industry standard, plus a lot more. Now, you can capture black-and-white or gray-scale images with a scanner and then edit them with PC Paintbrush Plus. You can even add color to black-and-white images. Of course, PC Paintbrush Plus takes full advantage of the 300 dot-per-inch resolution of today's laser printers. I was pleased with the sample graphics printed on my LaserJet Series II printer.

With its zoom-in feature, PC Paintbrush Plus lets you modify your own creations or existing graphics on a pixel-by-pixel basis. Menu-driven choices let you manipulate screen images by rotating, tilting, shrinking or enlarging. A choice of fonts in a dozen styles and sizes lets you add text to graphics from within the program.

While PC Paintbrush Plus supports all popular pointing and drawing devices (mice, joysticks and digitizers), I can't imagine that a joystick would provide the precise control needed for creating or editing serious graphics. I tried one briefly, but quickly changed back to my Microsoft Mouse. In any case, you will need one such drawing device to use the program. If you've never used a drawing program, you may feel a bit intimidated when PC Paintbrush Plus first presents its lively display screen and invites you to go to work. You'll get over that quickly, though.

Like many graphics and page layout programs, PC Paintbrush Plus has a screen layout that consists of a drawing area and a choice of tools for different tasks. To erase a portion of the screen, select "eraser" from the tool box. To fill a portion of a picture with an available pattern or a series of random dots, select "spray gun."

Other tools include a "paintbrush" that you'll use for most drawing and modifying, a "color eraser" for erasing specific colors or patterns and "scissors" for cutting out portions of a drawing to save as a separate file or to paste into another document.

Also shown on screen display are a series of pull-down menus and a choice of colors or black-and-white patterns.

PC Paintbrush Plus loads and saves files in the popular PCC format. It also will load graphics created in the Lotus PIC format. Graphics files saved by PC Paintbrush Plus, will load directly into the popular desktop publishing programs such as PageMaker and Ventura Publisher.

While you probably will use PC Paintbrush Plus to create or modify graphics for import into a page layout program, it isn't necessary to do so. You can print graphics directly from PC Paintbrush Plus, and you can define the precise size for the printed image.

A memory-resident program called Frieze is included. Each time you load the main program, Frieze loads automatically and attaches itself to DOS memory. Frieze is an excellent bonus that enables you to capture virtually any graphics screen image produced by other software. Captured screen images then can be loaded into PC Paintbrush Plus and modified or stored like other graphics.

From the moment you fire up PC Paintbrush Plus and see its bright drawing area and toolbox on the screen, you'll know you have a graphics medium that is limited only by your imagination and creative talents. Even minimal artistic talents are enhanced through structured and controlled drawing methods that let you create flawless straight lines, boxes, circles and angled lines.

PC Paintbrush Plus deserves its reputation as the standard for paint-type programs. While there are more sophisticated programs available, such as Z-Soft's Publisher's Paintbrush, PC Paintbrush Plus will do most work required of a graphics program without requiring lots of expanded memory.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

GO OLI or circle 16 on the Reader Service Form.

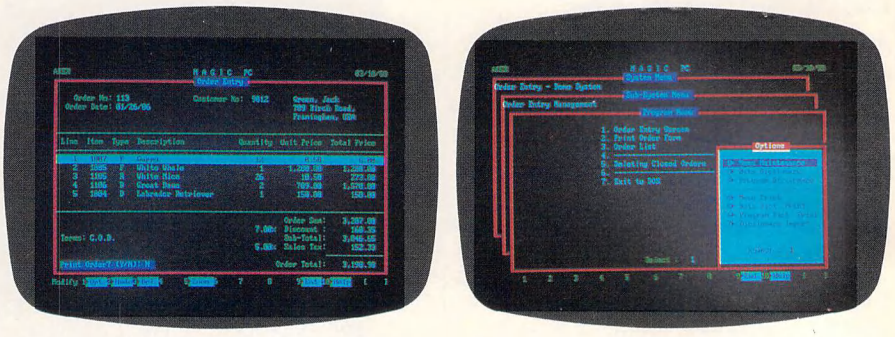
Magic PC

Helps Write Database Programs

Aker Corp.
18007 Skypark Circle #B2
Irvine, CA 92714
714/250-1718 or 800/345-MAGIC

Computers: IBM PC, PC-XT, PC-AT, PS/2 and close compatibles.
Operating Systems: MS-DOS or PC-DOS 2.0 and later (not yet available for OS/2).
Media: Supplied on two 5.25-inch diskettes (not yet available on 3.5-inch diskettes).
Copy Protection: None.
Other Requirements: Requires a minimum of 720K disk storage plus programming space; hard disk is strongly recommended.
Special Features: Maximum of 999 data files per program, 2,048 bytes per record, 24 keys per file, 10 segments per key; uses BTRIEVE database engine for file handling; includes both single-user and Novell Network support versions.
System Used for Test: 2MB AST Premium/286 computer with 80287 math coprocessor, Genoa SuperEGA HiRes Video Adapter, Sony Multiscan monitor and 80MB hard disk; running MS-DOS 3.2.
List Prices: $199 for development package; $59 each for runtime modules (10 for $299); $699 for unlimited use license.

Reviewed by Hardin Brothers



Taking care of time-consuming programming chores: *Magic PC*

Writing a database application normally requires many separate skills. A programmer must not only design the database and file relationships, but also code a user interface, file-handling routines, report generators and data validation routines. Database languages and add-on libraries simplify the process, but programmers still face time-consuming coding and debugging.

Magic PC (version 2.36) goes a step beyond database languages and libraries. Using Magic PC, a developer only has to design the database and, using a series of menus and windows, define screen and report formats and data-handling tasks. Magic PC takes care of the time-consuming programming chores.

You begin programming a database application by using Magic PC's own menuing system to define the entries in a series of application menus and submenus. Next, define the application data dictionary and the files that hold each collection of data.

The largest step is writing subprograms that enable a user to enter and manipulate data, using a specialized language reminiscent of both BASIC and Pascal but simpler than either. At the same time, you can define input screens, report formats and the choices the operator will have while running the program.

Each application subprogram comprises a number of separate routines, which can be called whenever an operator enters new information in a field, moves to a new record or finishes entering a record. Field validations are easy to perform, even if they involve checking information in one data file against fields in another file. Routines are written by entering operations in a table, often with the help of pop-up menus. Input screens and report forms are painted on the screen by using the cursor keys to move blocks of information and field areas.

Throughout the process, a programmer is free to move from task to task, adding new menu entries, expanding or changing the data dictionary and defining new tasks or procedures. Magic PC does not require any specific order of programming, but it can check the syntactic correctness and, to some extent, the logical correctness of your work whenever you wish.

Magic PC is quick and easy to use. At the same time, it is suitable for programming large, complex applications. It supports full relational databases, but, unlike some systems, it creates relationships between data files while the programming is running rather than as a function of the data dictionary. A programmer is free to define different relationships for different application tasks.

Magic PC isn't a tool for beginners. To use it effectively, you need a good grasp of database programming in general and relational databases in particular. You need to decide what information should be in which file, whether input should be line- or screen-oriented, how reports should be divided into sections and subtotals, what data analyses are necessary and what mathematical operations to use. Magic PC doesn't think for you; it simply takes much of the tedium out of creating a database application.

There is a great deal to like in Magic PC, but some things are surprisingly weak. The 400-page manual, for example, can be rated only fair. The first half is a tutorial aimed partly at operators and partly at programmers. The second half is a reference manual that I found disorganized and, at times, difficult to use. You'll probably have to read the entire manual two or more times before being able to use much of Magic PC's power.

There also are several minor improvements I'd like to see in Magic PC. Among them are support for 43-line EGA displays and a mouse interface; user-oriented help (on-screen programming help is extensive); support for networks other than Novell systems; use of the environment to find COMMAND.COM; and a larger set of built-in functions. Some of these have been promised for a new version that should be available by the time this review is published.

Overall, I find Magic PC a powerful and useful programming tool. If you enjoy creating database applications but don't like the drudgery that often entails, Magic PC certainly deserves serious consideration.

Hardin Brothers is a writer, computer programmer and teacher living near Los Angeles. He is a frequent contributor to several computer magazines. His CompuServe User ID number is 72165,735.

GO OLI or circle 17 on the Reader Service Form.

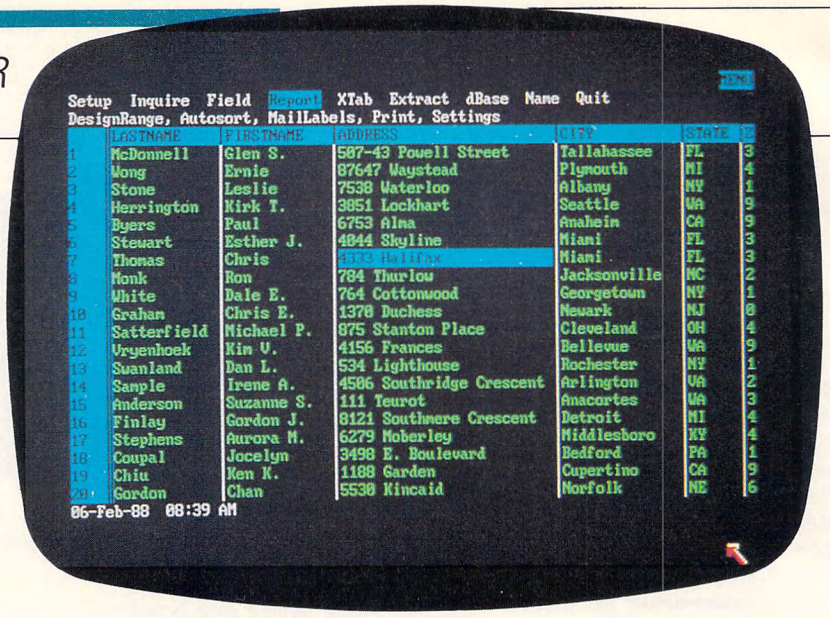
Data Manager PC:

An Entry-Level Database Manager

Timeworks
444 Lake Cook Rd.
Deerfield, IL 60015
312/948-9200

Computers: IBM PC, PC-XT, PC-AT, PS/2 and compatibles.
Operating Systems: MS-DOS or PC-DOS version 2.1 or higher; PC-DOS 3.3 on PS/2.
Media: Distributed on one 5.25-inch diskette; available on 3.5-inch diskette; requires one diskette drive.
Copy Protection: None.
Required Peripherals: Hercules graphics card or CGA adapter with appropriate monitor.
Other Requirements: Minimum 256K RAM.
Optional Items: Hard disk; color monitor; printer (supports various Epson, IBM and C.Itoh printers).
System used for test: 512K Victor V286 with 1.2MB diskette drive, 20MB hard disk and EGA color monitor.
List Price: $59.95

Reviewed by Franklyn Jones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2 Wong Ernie 87647 Waystead Plymouth MI
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4 Herrington Kirk T. 3851 Lockhart Seattle WA
5 Byers Paul 6753 Alna Anahein CA
6 Stewart Esther J. 4044 Skyline Miani FL
7 Thomas Chris 4333 Halifax Miani FL
8 Monk Ron 784 Thurlow Jacksonville NC
9 White Dale E. 764 Cottonwood Georgetown NY
10 Graham Chris E. 1370 Duchess Newark NJ
11 Satterfield Michael P. 875 Stanton Place Cleveland OH
12 Vryenhoek Kin V. 4156 Frances Bellevue WA
13 Swanland Dan L. 534 Lighthouse Rochester NY
14 Sample Irene A. 4586 Southridge Crescent Arlington VA
15 Anderson Suzanne S. 111 Teurot Anacortes WA
16 Finlay Gordon J. 8121 Southmere Crescent Detroit MI
17 Stephens Aurora M. 6279 Moberley Middlesboro KY
18 Coupal Jocelyn 3498 E. Boulevard Bedford PA
19 Chiu Ken K. 1188 Garden Cupertino CA
20 Gordon Chan 5530 Kincaid Norfolk NE
06-Feb-88 08:39 AM

Low-end product at a low-end price: *Data Manager PC*

Data Manager PC is a low-end product at a low-end price that works nicely. For $60, you get a database manager, a report writer, a label maker and a graphics program, all squeezed into a tight, little package.

Data Manager is predominantly pull-down-menu-driven, which makes it extremely easy to use. Command options are fairly self-explanatory, but it helps to get acquainted with the manual.

The first step in creating your database is to organize your file format. You're given an empty screen and, with the help of a few command prompts, you define field names, lengths and the types of information contained in each field. Data Manager can handle alphanumeric, numeric, date and various calculation fields. Data Manager handles up to 100 fields and 4,000 bytes of information per record.

Calculations may be defined as normal algebraic expressions or even as elaborate if-then-else statements. Unfortunately, it isn't possible to assign values to alpha-numeric representations in a given field. For example, you cannot create an equation whereby entering Product XYZ in the Order field will always put $50 in the Cost field of that record.

Once a file format is defined, you must save it before adding any records. Surprisingly, Data Manager needs more than 10 seconds to save each format to a hard disk, even on quick-and-dirty files. Password protection is available, but you can't assign a password until at least one record has been entered into the new file.

Data Manager will perform alphanumeric, numeric and chronological sorts, and it will execute search operations using various logical operators. The program's versatility in this area is surprising, and its sorting and searching speeds are excellent.

Data Manager's report writer also is easy to use, though rudimentary. The utility lets you define the report width (up to 250 characters), title, headings, columns and content. It works interactively with your record layout on screen, making it easy to structure a report. The reports can be output to the monitor or printer but, oddly, not to disk files.

If you decide to use Data Manager as a mailing list manager, you'll appreciate its ability to produce labels. Labels can be printed one, two or three across and can be up to 78 characters wide and 99 lines deep.

Data also may be graphed on screen or on paper using the built-in graphing utility. Graph options include bar, line and pie charts. However, there's no on-screen color support for graphs, and data are displayed only in CGA mode, so it wouldn't be effective to take screen shots of the charts. Nevertheless, the graphing utility is fast, easy to use and useful for hard-copy presentations.

Data Manager is, as a whole, a good performer. But there are a few items that need special attention. For example, you can view a directory of files but cannot selectively list Data Manager files. The best you can do is list all files within the Data Manager subdirectory, which includes program files because data files cannot be stored in their own subdirectories.

Another problem is that every time you load Data Manager, you must pass through a technical support information screen and a system configuration screen. There is no apparent way to get around these screens, and they get annoying. Furthermore, there is no way to load an existing file while loading Data Manager from the DOS command line.

Another problem is that there is no quick way to exit the program. You must back out of the menu levels and then select the Quit option. Before you quit, you must remember to save your file; Data Manager won't remind you.

A final complaint is that the manual is cursory, poorly indexed and occasionally inaccurate.

My complaints, however, are minor, and Timeworks told me that a forthcoming update to this package would show much improvement. But even with the shortcomings mentioned, this $60 package packs a pretty good punch. It is certainly too limited for most business applications, but it seems appropriate for smaller garage or basement operations that need organization and ease of use.

Franklyn Jones was formerly the managing editor of Interface Age *magazine and editor-in-chief of* IBM PC Update *magazine. He has written articles for various computer publications, is a regular contributor to* Online Today, *and serves as a marketing and communications consultant.*

GO OLI or circle 18 on the Reader Service Form.

Multiflex

Spreadsheet for Home and Office-at-Home Uses

COSMI
415 Figueroa Ave.
Wilmington, CA 90744
213/385-9687

Computers: Apple IIe and IIc (also available for Commodore computers).
Operating System: AppleDOS 3.3.
Media: Supplied on one 5.25-inch diskette.
Copy Protection: None.
Required Peripherals: Black-and-white monitor or color monitor with color turned off.
Other Requirements: None.
Optional Items: Second disk drive; printer.
System Used for Test: Central Point Software's Laser 128EX (Apple compatible) with one 5.25-inch diskette drive and Apple Imagewriter printer.
List Price: $39.95

Reviewed by Brian D. Monahan

Multiflex seems to be an updated version of Swift Sheet 128, a program for the Commodore 64, also from COSMI. Multiflex is available for both Commodore and Apple computers.

It comes with two manuals. The 95-page primary manual is printed in a 5- by 5-inch format and looks like text produced on a word processor and reduced from a full-sized format. So it is hard to read and it looks unprofessional. Another 16-page "Read Me First" manual has instructions indicating that its pages replace pages in the primary manual, which is an impossible task since there are no holes or other means of replacing pages. There are several illustrations, but they're too small and almost impossible to read. Since these illustrations are pictures of Commodore 64 screens, they are of little value to Apple users.

Since only one manual is provided (except for the "insert" pages), it refers to keys generically. For example, to return to the top of a menu on a Commodore, one presses F1; to do so on an Apple, one presses [CONTROL-P]. No mention of specific keys is made in the text. Instead, a "Jump to Top of Menu" instruction is used frequently, and the user must look up the appropriate key in the front of the manual.

Starting and using Multiflex is easy. The program performs satisfactorily as a spreadsheet. It lets the user create rows and columns of numbers and labels and enter formulas to perform calculations on those numbers. Formulas may be copied to ranges of cells. Column widths can be changed, and the format of numeric entries can be controlled by the user. Numerous built-in functions perform numeric and character operations.

Choosing Multiflex options is easily accomplished with pull-down menus. A desired choice is highlighted with an Arrow key and then executed with the Return key. Each menu offers an exit as the final option. The manual includes a map that can guide users through the menus.

Multiflex contains features found in many spreadsheets that are far more expensive. Among them is the capability to name ranges and perform operations on those ranges. The program enables users to delete and insert rows and columns; it also allows opening multiple screen windows. I was impressed to see that it is possible to control printer performance by sending appropriate codes to the printer from within the program.

However, some common spreadsheet features aren't supported. Multiflex won't produce graphs from the data, and it doesn't have a macro capability. (A macro is a "program" that automates several commands so they can be performed with a single command.) Another limitation is that Multiflex isn't completely standard. Users with prior spreadsheet experience may find that the Multiflex menu structure is different from what they are accustomed to using. Still, they should be able to move to and from Multiflex without much trouble.

Keeping in mind that Multiflex is designed for the home and office-at-home market, it is a satisfactory spreadsheet for the price. It handles routine calculations with ease, and it formats data in various useful ways. The major liability is the unsatisfactory manual, but the program itself should satisfy many users whose needs aren't too sophisticated.

Brian D. Monahan is an associate professor of computer science at Iona College in New Rochelle, N.Y. He has published dozens of articles on computing in scholarly and popular journals.

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Myths or Facts?

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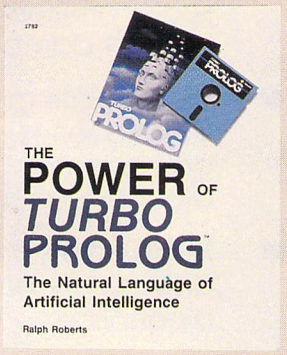
Online Book Reviews

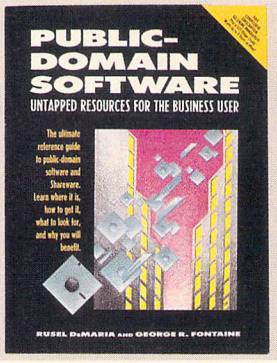
Following are summaries of book reviews available for reading this month in *Online Today Daily Edition*. To read the complete reviews, get online and enter the GO OLT command listed at the end of each synopsis.



The Power of Turbo Prolog: The Natural Language of Artificial Intelligence

By Ralph Roberts
TAB Books, 1987
195 pages, $14.95 (softcover)

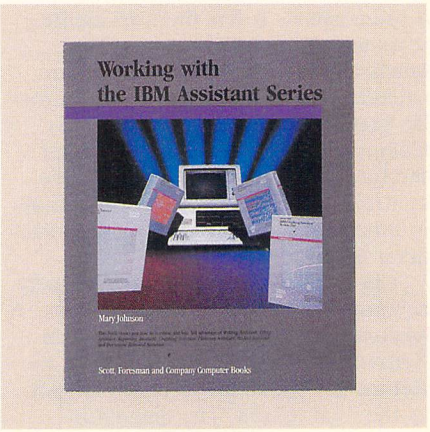
Written in clear, concise language, this book offers readers an introduction to the Turbo Prolog language as well as explanations on how to use its many features. Reviewer Ben Knox recommends it over the program's documentation. *GO OLT-5010*



Public Domain Software: Untapped Resources for the Business User

By Rusel DeMaria and
George R. Fontaine
M&T Books, 1987
355 pages, $19.95 (softcover)

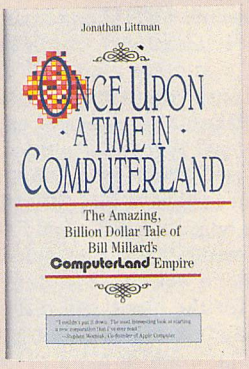
Reviewer William J. Lynott has high praise for this book, calling it the first reference that provides meaningful information about individual public-domain and shareware programs. *GO OLT-5040*



Working with the IBM Assistant Series

By Mary Johnson
Scott, Foresman and Co., 1987
368 pages, $19.95 (softcover)

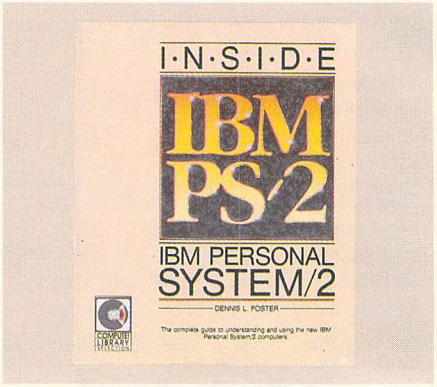
This book helps the novice learn to use the common elements of the seven products in the IBM Assistant Series in an integrated environment. The heart of the book is a series of scenarios of common problems that can be solved with the software. Reviewer Sharon Weizenbaum says this is especially useful for those needing specific guidance on a big project. *GO OLT-5020*



Once Upon a Time in ComputerLand

By Jonathan Littman
Price Stern Sloan, 1987
294 pages, $16.95 (hardcover)

Calling it "one of the best adventure tales I've read in a long time," reviewer James Moran will entice you to pick up this book that tells the story—complete with a French mistress, Berkeley poet and a goldminer—of the birth and growth of one of the country's largest computer retail chains. *GO OLT-5050*



Inside the IBM PS/2

By Dennis L. Foster
COMPUTE! Publications, 1987
292 pages, $19.95 (softcover)

This is one of the first books published on IBM's PS/2 computer and offers not only a nuts-and-bolts guide to the machine but also serves as an introductory guide to PS/2-related topics. Reviewer Franklyn Jones says he finds the approach confusing, but the information is presented accurately. *GO OLT-5030*

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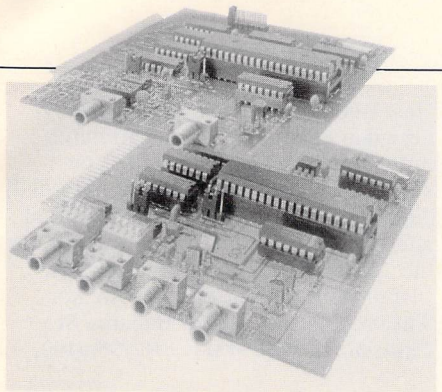

Fiber Optic Board

Black Box has introduced the Black Box Fiber Optic PC Boards, which enable a personal computer to transmit over fiber-optic cable.

The half-card boards are easy to install and simple to use and are available with either one or two ports, which are programmable. The single port model sells for $255, and the two port unit retails for $320. SMA connectors on either model will attach fiber-optic duplex cable and once installed enable transmission at up to 2.5 miles.

For information, contact Black Box Corp., P.O. Box 12800, Pittsburgh, PA 15241; 412/746-5500.

MacSnap Memory

Dove Computer has introduced MacSnap, a memory-expansion product for the Macintosh SE.

MacSnap 2SE is a socketed SIMM product using 256K DRAM, which enhances the SE's memory to 2MB of contiguous RAM. The retail price is $499.

For information, contact Dove Computer Corp., 1200 N. 23rd St., Wilmington, NC 28045; 919/763-7918.

WordPerfect Prufreading

Ewing Systems has introduced Prufread, a program that eliminates duplicates and detects field errors in WordPerfect secondary merge files.

This WordPerfect proofreading utility scans the secondary merge file or Notebook file and automatically removes exact duplicates, flags possible duplicates, flags records that do not contain the proper number of fields and reports on missing end of record marks. The retail price is $69.95.

For information, contact Ewing Systems, 409 W. 24th St., New York, NY 10011; 212/675-1974.

Table Conversions

Users of Lotus 1-2-3 running on IBM and compatible computers can significantly reduce the time it takes to enter financial tables into their spreadsheets with new software for scanners from Datacopy Corp.

Called OCR 4mat, the software automatically converts scanned data into files that can be read by Lotus 1-2-3. It works by taking an already scanned textfile, extracting tabular data and then formatting the data into a WKS file for Lotus 1-2-3. OCR 4mat recognizes cell formulas as well as labels for rows and columns. The retail price is $195.

For information, contact Datacopy Corp., 1215 Terra Bella Ave., Mountain View, CA 94043; 415/965-7900.

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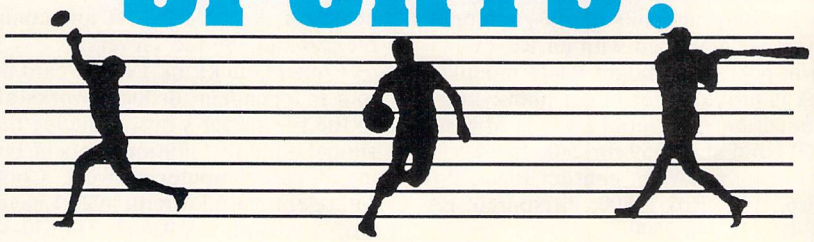

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Palm-Sized Modem

The Black Box Tote-A-Modem from Black Box Corp. is a portable modem designed for a laptop or portable computer.

Powered by its own internal nine-volt battery, the Tote-A-Modem is full Hayes AT-Command Set-compatible and provides auto-dial, auto-answer, pulse and tone-dialing, and non-volatile storage of up to 20 commands. It will work with practically any asynchronous computer equipped with an RS-232 serial port. A standard RJ-11 modular jack is provided for direct phone-line connection. The retail price is $199 for 1200 baud and $359 for 2400 baud.

For information, contact Black Box Corp., P.O. Box 12800, Pittsburgh, PA 15241; 412/746-5500.

Anchor PS/2 Modems

Anchor Automation has introduced the Anchor 1200 PS and 2400 PS modems designed for the IBM PS/2, models 50, 60 and 80. Anchor-Talk software, which enables them to support foreground and background multitasking operations under the IBM OS/2 operating system, is also available.

The internal 1200/300- and 2400/1200/300-baud modems are 100 percent Hayes-compatible and are physically designed as Micro Channel Architecture cards to plug into the PS/2 bus. Features include auto-answer, auto-dial, auto-redial, automatic speed detection and more. The retail prices are $269 for the 1200PS and $349 for the 2400PS.

For information, contact Anchor Automation Inc., 20675 Bahama St., Chatsworth, CA 91311; 818/998-6100.

QuickLink IV

InterContinental Micro has introduced an add-on card that provides a complete four-user network on one board for the IBM PC-AT and compatible 286 and 386 file servers.

Called QuickLink IV, the card adds four independent, diskless workstations to the file server's bus, reducing the support and installation costs of building a microcomputer network. Contact InterContinental Micro, 4020 Leaverton Ct., Anaheim, CA 92807; 714/630-3714.

8-Channel Modem Card

The world's first 8-channel, 2400-baud modem card for the IBM PC, PC-XT, PC-AT and compatibles has been introduced by Galacticomm.

Called the Breakthrough Modem 2408, the modem supports up to eight simultaneous high-speed telephone connections. New software supports up to eight Model 2408s for a total of up to 64 simultaneous 2400-baud users on a single 386-class machine. Each modem module is fully intelligent and can send or receive data autonomously. Prices start at $2,993.

For information, contact Galacticomm Inc., 4101 SW 47th Ave., Suite 101, Fort Lauderdale, FL 33314; 305/583-5990.

IXL: The Machine Learning System

IXL: The Machine Learning System from IntelligenceWare combines sophisticated statistical and artificial-intelligence techniques to automatically analyze and discover knowledge hidden in large databases.

IXL can read databases in dBase III, Lotus and ASCII format and outputs easily understood rules that illuminate previously unknown relationships and knowledge. The system can deal with inexact and omitted data and allows users to specify their own acceptable level of errors. Designed for the IBM PC, PC-XT and PC-AT, it retails for $490.

For information, contact IntelligenceWare Inc., 9800 S. Sepulveda Blvd., Suite 730, Los Angeles, CA 90045; 213/417-8896.

Multi-EGA Graphics Board

Multi-EGA by Boca, a graphics board from Boca Research, has been enhanced to contain four Lotus 1-2-3 and Symphony device drivers, enabling Lotus users to display their applications at a maximum 132 columns by 43 lines on multiple frequency monitors.

Features of the Multi-EGA include 16 simultaneous colors from a palette of 64 in EGA mode, software permitting WordStar to run in a variety of text modes, a screen-save feature and backward compatibility with EGA, CGA and monochrome monitors. The upgraded graphics board will be provided to registered owners at no additional charge.

For information, contact Boca Research Inc., 6401 Congress Ave., Boca Raton, FL 33431; 305/997-6227.

Go Online For More Product Announcements

The following new product announcements are available this month in *Online Today Daily Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

echoBOX, *an intelligent keypad for the IBM PC, PC-XT, PC-AT, PS/2 and compatibles, Inmar Inc.*

Textmate, *word processing software for the IBM PC, Professional Software.*

Roundup! (version 2.0), *text retrieval software for the Macintosh, Virginia Systems Software Services Inc.*

The Text Collector, *text retrieval utility for the IBM PC, PC-XT, PC-AT, PS/2 and compatibles, O'Neill Software.*

Q-DOS Network Manager, *a full-featured hard disk management system, Gazelle Systems Inc.*

Calendar/1, *prints or display events inside the boxes of a monthly calendar on the IBM PC, PC-XT, PC-AT and compatibles, Clear Systems.*

The Logical Connection, *cost effective means of connecting computers and peripherals, Fifth Generation Systems.*

WithStyle, *utility that manages and edits Xerox Ventura Publisher style sheets, Pecan Software Systems Inc.*

Show Me! (version III), *file-viewing utility program for the IBM PC, PS/2 and compatibles.*

IBM Keyguard, *plastic keyguard for the IBM 101 key enhanced keyboards, ComputAbility Corp.*

Guidelines to Requesting Information Through OLI

Online Inquiry

Online Inquiry is *Online Today*'s electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and type GO OLI at any prompt.

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ONLINE INQUIRY (OLI)
1. OLI Instructions
2. Online Today Display Ads
3. Print Edition Reviews
4. Shopper's Guide Mini-Ads

Display Ads

GO OLI-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe Page OLI-160
ONLINE TODAY ADVERTISERS/OLI
1. July 1988 Advertisers
2. June 1988 Advertisers
3. May 1988 Advertisers

Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, go to page OLI-280 and select the appropriate listing, such as July Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe Page OLI-280
REVIEW LISTINGS/PRINT EDITION
1. July Hardware Listings
2. July Software Listings
3. July New Product Listings

Shopper's Guide

GO OLI-70 to get information about *Online Today*'s mini-ad program.

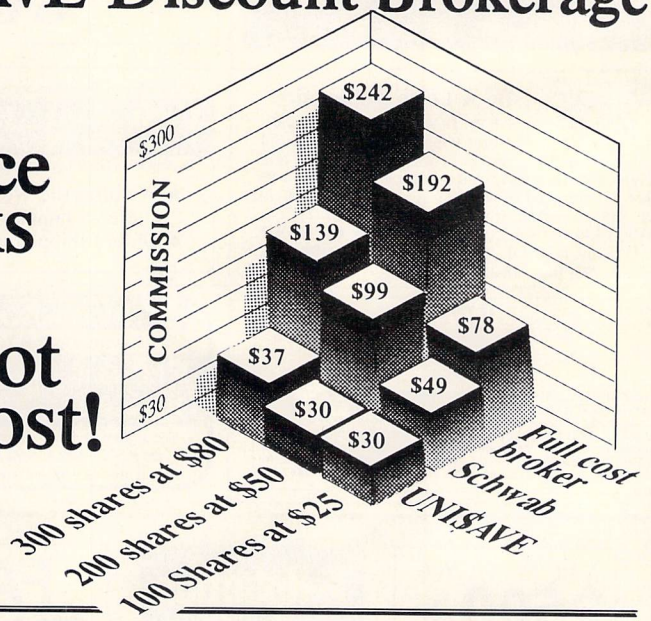
To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.

CompuServe Page OLI-70
SHOPPER'S GUIDE
1. About Shopper's Guide
2. Rates and Information

***Note:** Additional requests during the same session will not require you to re-enter your name and address.

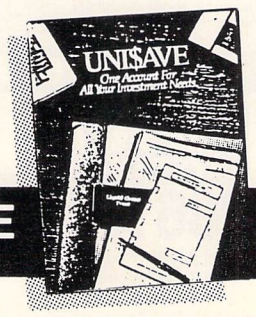
UNI$AVE Discount Brokerage

The service stacks up... but not the cost!



Compare UNI$AVE's rates with those charged by your broker. Our rates are 28% to 75% lower than Schwab and most other *discount* brokers.* And with a UNI$AVE asset management account you have. . .

- A broad range of investment choices, including stocks, bonds, options, mutual funds, IRA's, Keogh, tax-exempts and more.
- 24-hour telephone and personal computer access.
- Unrestricted checkwriting with expense coding.
- High, daily money-market income.
- Free VISA access card.



Call 800-UMC-SAVE
(24-HOUR ANSWERING)

UNIFIED MANAGEMENT
429 N. Pennsylvania Street, Indianapolis, IN 46204-1897
One of the MONY Financial Services Companies
*Survey of published rates as of March 1, 1988 MEMBER: SIPC, Midwest Stock Exchange

GO OLI or circle 22 on the Reader Service Form.

SHOPPER'S GUIDE

Turn Your PC/XT/AT Into Multi-User, On-Line System

INFOHOST®
Multi-user On-line System Software
(Reviewed by PC Week on 5/19/87)

You can now place a database of goods and services on-line using your own PC, so your customers can dial in over phone lines to access information, leave messages, and make purchases via modem. InfoHost, which can support as many as eight simultaneous modem interfaces, features a customizable relational database that can be adapted to the needs of your business.

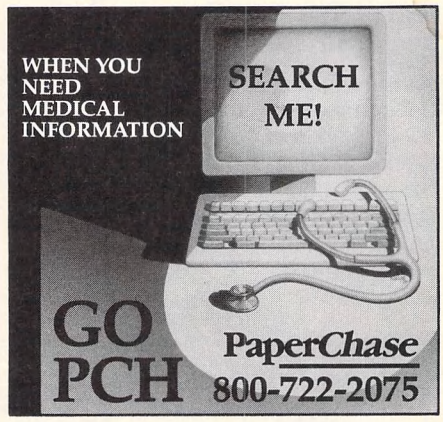
A-Comm Electronics, Inc.
377 Route 17 South, Hasbrouck Hts., NJ 07604
201/288-7885; TLX: 4948376

Call Our Demo System
201/288-7792
(With Modem Settings 8/1/N)

If you're looking for the lowest air fares for your summer travel, try the

ELECTRONIC EDITION®

GO OAG



Be A Lotto Millionaire!

NEW! Lotto Picker™ Plus v2.0 stores winning Lotto & Pick 3/4 numbers & uses probability analysis in order to select what might be your million $$ ticket. Guaranteed to work for all lotteries worldwide. Not copy-protected. For IBM, 64k Apple II, & C64/128 **$34.95** (+4.55 sh). 3.5" add $10. **GE RIDGE**, 170 B'dway. #201OL, NYC 10038. **Orders 1-800-634-5463 ext. 293**. Info 718-317-1961.

Direct From Our Roaster To You

C•O•F•F•E•E EMPORIUM **GO COF**

Purveyors of Gourmet Coffees & Teas

- We offer the World's Rarest Coffee—Jamaican Blue Mountain
- Orders shipped within 48 hours

!GO ROCK

"Get Satisfaction"
Make online friends who know how to have fun on
Rocknet™
Music News, Gossip, Concert Listings, Trivia, Reviews, Download Music & More!
Just !GO ROCK

$$ WIN $$
with our
SPORTS
Handicapping
Software

THOROUGHBRED/HARNESS Handicapping - $52.95. GREYHOUND Handicapping - $52.95. Up to 13 entries analyzed: class, speed, times, odds, track, post, stretch, & finish positions. PRO FOOTBALL, BASEBALL, BASKETBALL Software - $52.95 each. Handicap races & games in minutes. For: Apple II+ce, Atari, IBM PC, COM 64/128, TRS-80. SOFTWARE EXCHANGE, Box 5382-OL, W. Bloomfield, MI 48033. Info/orders: 313/626-7208. VISA/MC. 1-800-527-9467.

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NOW ONLY **$699**
Full warranty. Special quantity and term commitment arrangements available.

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MODEMS

- Hayes compatible
- 300, 1200, 2400 Baud
- Auto dial/answer
- US made, 2 yr. warr.

2400 BAUD
NOW ONLY **$139**

FAX ON-A-CARD

Fully automated FAX now to any Group III FAX machine. Unattended background operation. Send scanned, ASCII, or word processed files. Use any laser or dot matrix printer for output.

PC EDITOR'S CHOICE

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Hand Scanners Available

MULTI-LINE INTEGRATED VOICE MAIL TELEPHONE RESPONSE CARD

100s OF USES
THE PROFESSIONAL

IDEALLY SUITED FOR:
- Information & Order Taking
- Voice Mail Answering System
- Mail Forwarding & Pager Alert
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BEST PRICES ANYWHERE!

30 MB HARD DISK SYSTEM
286 AT

- Intel 80286 Processor
- 80287 Co-Processor Slot
- 30 MB Seagate H/D
- VGA/EGA Graphics Card
- Novell, IBM, & OS/2 Compatible System

NOW ONLY **$995**
Your Choice of Optional Monitors

HUNDREDS OF SALE ITEMS EVERY DAY!

TOSHIBA 130 MB/28 MS HD	$999.	VIDEO-7 VEGA VGA CARD	$289.
TOSHIBA 2 MB 3½ IN. FD	129.	ORCHID VGA (1024x768)	319.
TOSHIBA 1.2 MB 5¼ IN. FD	99.	ORCHID 286 UPGRADE CARD	389.
MINISCRIBE 43 MB HD SYST.	369.	QUADRAM 386/XT	699.
SEAGATE 30 MB HD SYSTEM	299.	GENOA EGA PLUS & GEM	199.

VISIT OUR 24 HR BBS (805) 650-0193 (8/1/N)
FOR COMPLETE CATALOG & PRODUCT LISTINGS

ONLINE STORE

BRAND NAMES FOR MUCH LESS!
(805) 650-0188
THIS SUPERCEDES PRIOR ADS • SUBJECT TO SUPPLY ON HAND

MasterCard VISA AMERICAN EXPRESS

Ask About BBS Software

GO OLI or circle 21 on the Reader Service Form.

INFORMATION

The advertisers and manufacturers of the products appearing in Online Today *will be pleased to send additional information about their products or services—at no cost to you. Make your selection by circling the advertiser or product by number on the form below. Fill in the requested information and mail to:* Online Today, *Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.* Online Today *will see that your requests are forwarded promptly. You may get a faster response by using the Online Inquiry service system. Simply enter GO OLI at any prompt on the CompuServe system and follow the OLI prompts. Your request will be forwarded.*

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READER INQUIRY

For free information on products or services in this issue of *Online Today*, fill in your name, address, ZIP code and phone number. Then circle the number that corresponds to the number of the advertisement or article in which you are interested.

CompuServe subscribers can request information electronically by entering GO OLI at any prompt.

(Please print or type)

Name _____

Company Name _____

Address _____

City _____

State _____ ZIP _____ Business Phone _____

Mail to: Online Today, Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.

Circle inquiry number from this issue only

1	21	41	61	81
2	22	42	62	82
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5	25	45	65	85
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10	30	50	70	90
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13	33	53	73	93
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17	37	57	77	97
18	38	58	78	98
19	39	59	79	99
20	40	60	80	100

July issue, not valid after October 1988.

UPDATE

EasyPlex Enhances Message Capabilities

EasyPlex offers the ability to send and receive ASCII and binary messages up to 50,000 characters. Messages to and from EasyPlex, Telex machines, MCI Mail and InfoPlex are included.

To accommodate the new message limit, EasyPlex messages will be automatically deleted 90 days after being sent. To renew the 90-day period, read the message and select Option 6, Save in Mailbox, at the EasyPlex menu. GO EASYPLEX

More Weather Reports Online

Weather reports for Alaska, Hawaii, Puerto Rico and the Virgin Islands are available in the Public Weather Service. Local Forecasts are available for Hawaiian cities: Lihue, Honolulu, Kahului and Hilo; and Alaskan cities: Anchorage, Fairbanks, Juneau, Nome, Barrow, Valdez, Kodiak, McGrath, Ketchikan and Yakutat. The Alaska State Summary is also available. To obtain the forecasts for Puerto Rico and the Virgin Islands, select State Forecasts and type PR and VI respectively. GO WEA

Desserts Direct in The Electronic Mall®

Desserts Direct features a selection of cakes in The Electronic Mall® Gourmet department. Select from six cheesecakes and chocolate truffle, carrot and black forest cakes. Desserts Direct offers two-day delivery service and encloses a free message with each purchase. GO DS

Support for TAPCIS in Forum

The TAPCIS Forum provides support and information on the TAPCIS communications program for MS-DOS computers. TAPCIS, a CompuServe interface, saves time and connect charges by automating online commands. The forum is managed by Support Group Inc. and the author of TAPCIS, Howard Benner. GO TAPCIS

Waldenbooks Re-opening Mall Store

Waldenbooks has a wide selection of new releases and bestsellers, including computer books, kids books and gift books, and more than 1,000 videos. Order a catalog or sign up for the frequent shopper service in the Books/Periodicals department of The Mall. GO WB

McGraw-Hill News Offers Hourly SNAPSHOT

McGraw-Hill News offers an hourly SNAPSHOT of business and market news including leading market indicators on the half hour Monday through Friday.

McGraw-Hill SNAPSHOT covers the Standard and Poor's 500, Dow Jones Industrial Average, New York Stock Exchange Composite Volume and NASDAQ Composite. The five top business headlines are also available hourly. Subscribers can read the full text for these headlines or access McGraw-Hill News in the Executive News Service. In addition, the Business Calendar outlines key announcements expected in the coming week. GO MHSNAP

Ankai Electronics Available Online

Established in 1979, Ankai Electronics manufactures high-quality speaker crossover networks for home, auto and pro speaker systems. Ankai also offers loudspeakers, a free print catalog and a "Monthly Tips" column on electronics. Visit Ankai Electronics in The Mall. GO AE

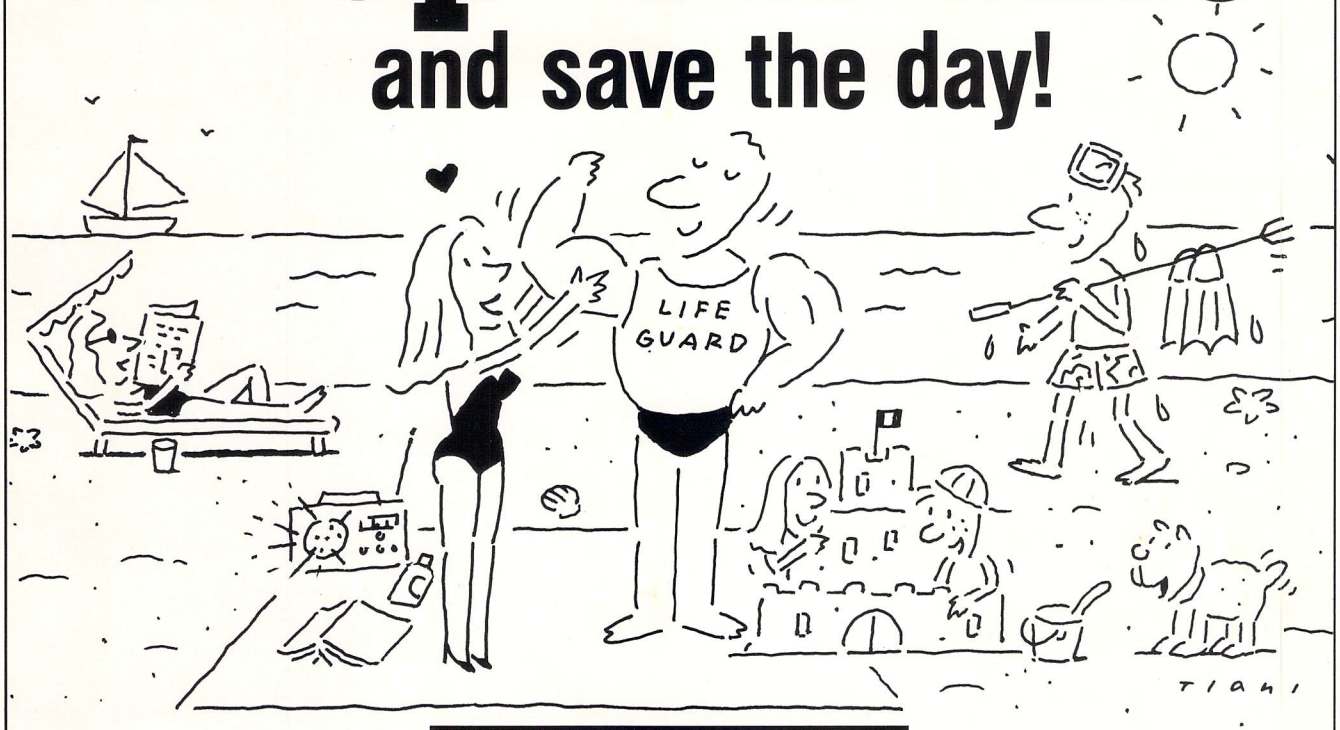
1988 Demographic Data Available

SUPERSITE, the Neighborhood Reports and the US-State-County Profiles have been updated with 1988 information. Now you can retrieve demographic, sales potential and market segmentation reports containing 1988 information and 1993 forecasts. GO DEMOGRAPHICS

Service Terms and Rules Updated

CompuServe has recently updated its Agreement Terms and Operating Rules for the CompuServe Information Service. The new versions are available online and are effective immediately. The changes represent clarifications and minor technical corrections to more accurately reflect current business practices. Connect time is free while reading the new Service Agreement Terms and Rules. GO RULES

Shop On-line
and save the day!



SPECIAL INTRODUCTORY OFFER FOR COMPUSERVE SUBSCRIBERS!

3 MONTHS FOR $1

You've got better things to do with your precious summer days than spend them in stuffy, crowded department stores searching for bargains—especially when you don't have to. With Shoppers Advantage you can bargain shop from your PC whenever it's convenient for you, rain or shine.

And, not only will you have more time to work on your tan, you'll be able to save up to 50% off manufacturers' list prices on over 250,000 name-brand products. When you see how much you can save, you'll agree Shoppers Advantage gives you a better way to spend your summer and your money!

- **User-friendly convenience.** We're open 24 hours a day, 7 days a week. Browse on-line, order on-line, and have your purchases delivered to your door. Simple menus and step-by-step instructions make it easy.
- **Tremendous selection.** Without leaving the comfort of your home or office, compare makes and models, compare name-brands—best of all, compare prices!
- **Lowest-price guarantee.** If you can find a lower price on an item you buy from us, we'll refund the difference.*
- **Double warranties.** You can double the manufacturers' warranty up to one year at no additional cost.*
- **Free catalogs.** We'll keep you informed about our latest "Best Buys" and exciting additions to our database of fine products!
- **Enroll today.** Sign on to CompuServe and enter **GO SAC** to have full membership privileges for 3 months for just $1. Then, unless you notify us, we will continue your membership and bill you for the low annual fee of $30. And, of course, you can cancel and receive a full refund at any time during the first year.

Shoppers Advantage™
ON THE ELECTRONIC MALL®

Enter GO SAC or Call 1-800-843-7777

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*Conditions of our Lowest-Price-Guarantee and Double Warranty Policy can be read on-line. B680T

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